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# AUTHORS AND ACKNOWLEDGMENTS



#### **Authors and acknowledgments**

This report has been compiled by the Policy and Guarantee team at IFOAM-Organics International: Joelle Katto-Andrighetto (team leader), Diane Bowen, Federica Varini, Simona D'Amico and Cornelia Kirchner. Markus Arbenz, Gabor Figeczky, Konrad Hauptfleisch, David Gould, from IFOAM-Organics International have also reviewed and contributed to the report.

The work to produce this report and the Global Policy Toolkit on Public Support to Organic Agriculture as a whole has been funded by SDC, the Swiss Agency for Development and Cooperation, and IFOAM-Organics International who co-funded the work through its core budget. Co-funding was also received from the OTEA project (Organic Trade and Value Chain Development in East Africa) financed by SIDA, the Swedish International Development Cooperation Agency, as well as from the ProEcoOrganic Africa project, funded by SDC and Hivos and by Bio.inspecta from Switzerland. The authors would like to express their deep gratitude to these organizations for their support.

The authors also want to thank the various experts that have contributed by reviewing this report (or parts of it) and provided their valuable comments and inputs. This includes particularly Gunnar Rundgren from Garden Earth, Paul Holmbeck from Organic Denmark, Helga Willer from FiBL, Stephen Meredith and Bram Moeskops from IFOAM EU, Nic Lampkin from the Organic Research Center, David Muckenhuber from the Austrian Development Agency, Monique Marez from the US Organic Trade Association, Joeri Leysen from Caritas International Belgium, Christina Blank from SDC, Frank Eyhorn from Helvetas, Sabyasachi Roy, PhD researcher from the Institute of Agriculture, Visva-Bharati in India.

This report is an adapted version of the general report entitled "Guidelines for public support to organic agriculture". This version has been simplified and summarized to fit the particular needs of Sub-Saharan African countries. Measures not particularly relevant to the current context of those countries have been removed from the report. The complete original report is available on the IFOAM- Organics International website, in the section of the Global Toolkit on Public Support to Organic Agriculture.

#### **Acronyms and Abbreviations**

ADB Asian Development Bank

AMABIO Moroccan Association of Organic Agriculture

AMS USDA Agricultural Marketing Service

APEDA Agricultural & Processed Food Products Export Development Authority of

India

APIA Agricultural Investments Promotion Agency of Tunisia

ASEAN Association of Southeast Asian Nations

BAR Bureau of Agricultural Research of the Philippines
BÖLN German Federal Organic Farming Support Scheme

BuB Bottom-Up Budgeting CAP Common Agricultural Policy

CCOF California Certified Organic Farmers

CEO Chief Executive Officer

CLOA Central Laboratory for Organic Agriculture of Egypt
COST European Cooperation in Science and Technology

CSO Civil Society Organization

CTAB Technical Center for Organic Agriculture of Tunisia

CORE Coordination of European Transnational Research in Organic Food &

**Farming Systems** 

DA Department of Agriculture

DADO District Agriculture Development Office
DARCOF Danish Research Centre for Organic Farming

DDT Dichlorodiphenyltrichloroethane

DG ENV Directorate-General for the Environment of the EU Commission

DoA Department of Agriculture

DOA Department of Organic Agriculture
DUS Distinctness, Uniformity and Stability
EPA Environmental Protection Agency

EPOPA Export Promotion of Organic Products from Africa

EQIP Environmental Quality Incentives Program

ERS Economic Research Service

ETHZ Swiss Federal Institute of Technology in Zurich

EU European Union

FAO Food and Agriculture Organization of the United Nations

FAS USDA Foreign Agricultural Service

FiBL Swiss Research Institute of Organic Agriculture

FNAB French federation of Organic Farmers

GIZ German Society for International Cooperation

GMO Genetically Modified Organism

HAFL School of Agricultural, Forest and Food Sciences in Zollikofen

HS Harmonized System

ICROFS International Center for Research in Organic Food Systems

IFAD International Fund for Agricultural Development

LBI Louis Bolk Institute

LEADER Liaison Entre Actions de Développement de l'Économie Rurale

LGU Local Government Unit

MASIPAG Farmer-Scientist Partnership for Development

MEWA Ministry of Environment, Water and Agriculture of Saudi Arabia

MoA Ministry of Agriculture MSc Master of Science

M&E Monitoring and Evaluation

NASS USDA National Agricultural Statistics Service. NCOF National Center for Organic Farming of India

NGO Non Governmental Organization

NOAB National Organic Agriculture Board of Philippines

NOAP National Organic Agriculture Program

NOGAMU National Organic Agricultural Movement of Uganda

NOP National Organic Program

NPOF National Project on Organic Farming

OA Organic Agriculture
OAA Organic Agriculture Act
OAP Organic Action Plan
OTA Organic Trade Association

OTEA Organic Trade and Value Chain Development in East Africa

OTP Organic Trade Point

ÖMKi Hungarian Research Institute of Organic Agriculture

PGS Participatory Guarantee Systems

PKVY Indian Traditional Farming Improvement Program

PRO-Bio Czech Organic Farmers Association

QR Quick Response

RDD Organic Research, Development and Demonstration Program

RDP Rural Development Program R&D Rural and Development

SDC Swiss Development Cooperation

SEAE Spanish Society for Organic Agriculture SECO Swiss State Secretariat for Economic Affairs

SENASA Servicio Nacional de Sanidad y Calidad Agroalimentaria SIDA Swedish International Development Cooperation Agency

SLU Standard Labor Unit

SME Small and Medium Enterprise

SNV Netherlands Development Organization

SWOT Strengths, Weaknesses, Opportunities, and Threats

TP Technology Research Platform for Organic Food and Farming

UN United Nations

USDA United States Department of Agriculture

VAT Value-added tax

VCU Value for Cultivation and Use WHO World Health Organization WTO World Trade Organization WUR Wageningen University

ZHAW Zurich University of Applied Sciences



# EXECUTIVE SUMMARY



These guidelines have been prepared by IFOAM-Organics International as part of the <u>Global Policy Toolkit on Public Support to Organic Agriculture</u>. This is a special adapted version of a more complete report. It has been adapted to suit the needs and current context of Sub-Saharan African countries. Country examples are chosen to reflect situations that are most transposable to Sub-Saharan African contexts.

It makes political sense to support organic agriculture, as it contributes in many ways to the welfare of society and to achieving the Sustainable Development Goals. It is also an infant economic sector with strong consumer demand and market potential. Recognizing this, governments in all parts of the world have initiated public policies and programs to support the organic sector. Such political support may be a result of different political strategies and goals, such as tapping into export markets, or addressing the issue of externalities in agriculture. Designing organic support policies that will most effectively address those political goals and be adapted to the situation of each country is a complex undertaking. These guidelines aim to assist policy makers and advocates in their choice of appropriate policy measures.

The guidelines contain some overall policy design considerations, such as the usefulness of strategic instruments and organic action plans, or the need to achieve and raise the supply-demand equilibrium. The two overarching recommendations when it comes to government support to the organic sector are the following:

- 1) The role of the government in the organic sector should primarily be that of an enabler, and only secondary that of a controller. In other words, setting up a government organic regulation without supporting measures to promote organic development is like putting the cart before the horse. In this report (and more generally in the *Global Policy Toolkit on Public Support to Organic Agriculture*, we deal only with the "horses" (the enabling policies). For what concerns the "cart" (the regulating policies), readers are referred to the other toolkit developed by IFOAM-Organics International: the *Organic Regulation Toolkit*.
- 2) Policy design and implementation should always be done in a public-private partnership and multi-stakeholder approach. Most of the organic expertise, as well as the motivation and energy to advance the sector, lie with the private sector composed of producers, companies and NGOs working on organic agriculture on a daily basis. A particular challenge for policy-making is that the concept of organic farming does not belong to government to modify and adapt at will. The concept was developed by producers, interested individuals and civil-society organizations in the 20th century and subsequently sustained by consumers through special markets, particularly since the 1970s. The concept of organic agriculture has also developed in a supra-national sphere, with a consolidated international organic movement that has adopted unified global landmarks such as the Principles of Organic Agriculture. Although the concept may now be increasingly controlled by public institutions through regulations, the involvement of stakeholders and their ownership is critical to maintain its integrity and part of good practice in policy development and implementation<sup>1</sup>.

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<sup>&</sup>lt;sup>1</sup> Stolze M. and Lampkin N., 2009, *Policy for organic farming: Rationale and concepts*.

Government can also have much more leverage and effectiveness in the implementation of organic support measures if it relies on existing structures and expertise of the private sector.

The core of the guidelines consists of a compilation of facts, arguments, best practices and tips on the full panel of policy measures that have been identified to support organic agriculture. They have been categorized into "Push measures", "Pull measures" and "Enabling measures".

"Push measures" are those that encourage the supply of organic products, i.e. measures supporting:

- Organic research and extension
- Organic input development and use
- Organic certification
- Organic vocational training and academic programs
- Conversion and maintenance of areas under organic production
- Agri-environmental practices compatible with organic production
- Organic operators through general tax breaks
- Organic farm investment
- Farm income diversification and agro-tourism
- Organic processing, product development and marketing
- Supply chain development projects

"Pull measures" are those that encourage the demand for organic products, i.e. measures supporting:

- Consumer education and promotion campaigns
- Public procurement
- Domestic trade and retail uptake
- A common logo for organic products
- School organic gardening and curricula
- Export support
- Organic trade agreements and equivalence

"Enabling measures" are those that have overarching effect on supply and demand, i.e. measures supporting:

- National data production and dissemination
- Institutional development of organic associations
- Building organic expertise within the public sector
- Development of Participatory Guarantee Systems

Finally, in an effort to ensure policy coherence, one should look beyond the above measures and analyze general agricultural and food policies that can have negative impacts on organic development. The guidelines present a few of such policies and how such they can be amended to avoid such negative impacts. The policies identified are:

- Subsidies on chemical fertilizers or synthetic pesticides
- Approval of pesticides imports and pesticide use

#### **Executive Summary**

- Unfavorable regulations on farm-made and organic fertilizers, plant protection products and farmers seeds
- Unfavorable agricultural risk management programs (crop failure compensation schemes, etc.)
- Allowance of GMO crops.



# CHAPTER I: CONTEXT, SCOPE AND USE OF THESE GUIDELINES



These guidelines have been prepared by IFOAM-Organics International as part of the <u>Global Policy Toolkit on Public Support to Organic Agriculture</u>. This is a special adapted version of a more complete report. It has been adapted to suit the needs and current context of Sub-Saharan African countries. The guidelines present a compilation of facts, arguments and tips on the full panel of policy measures that have been identified to support organic agriculture. It is destined to serve the needs of those who plan policies and programs to support organic agriculture, as well as those who advocate for such programs. This includes national and local governments, regional and international organizations, donors, consultants, as well as NGOs, private sector bodies and organic advocates.

After this short introduction (Chapter I), Chapter II gives a brief summary of the reasons that justify public support to organic agriculture, and Chapter III gives a historical and global overview of such public support.

Chapter IV provides advice on determining the right mix of support measures through national/regional action plans and guidelines.

The following Chapters (V and VI) provide examples of different forms of policy support. While Chapter V deals with specific policy measures to support organic agriculture, Chapter VI looks at the general agricultural and food policy framework and how it may impact organic agriculture.

A single country or territory will not implement all those measures. Choices will have to be made, in a process of determining the right policy mix. It is not possible to present an "ideal policy mix" applicable to all countries and regions. Designing the most effective policy mix for a specific country or region will have to be based on an in-depth analysis of the specific situation and development stage of the organic sector in that country or region, as well as the overall agricultural policy framework and the objectives and attitudes of the local decision makers. These guidelines therefore do not present an ideal policy mix. Rather, they give an overview of the main types of public support measures that can favor organic development from various angles, presenting lessons learned from various countries on the use of such measures, and guiding the user in the difficult exercise of setting their own policy mix or advocacy strategy.

This report is accompanied by a set of case studies, power point presentations, policy briefs (called "Policy Summary" in the context of this toolkit), links to external resources and other elements, which together constitute the "Global Policy Toolkit on Public Support to Organic Agriculture" developed by IFOAM-Organics International. The toolkit is intended for use by policy makers, as well as by policy advocates. It does not go into details about the "why" organic agriculture should be supported by governments (apart from a brief summary in Chapter II below), as this has already been covered extensively by various organizations and publications. Rather, this toolkit answers the question "how to do it".

These guidelines (and more generally the toolkit) have been first compiled and published in 2017, but are intended as a living document. IFOAM-Organics International will keep abreast of major developments and innovations in the area of pro-organic

#### **Chapter I: Context, scope and use of these guidelines**

policies, and will publish updated versions of these guidelines accordingly. All users are encouraged to communicate any significant developments, lessons learned and new data available, to the IFOAM-Organics International Head Office at <a href="mailto:ogs@ifoam.bio">ogs@ifoam.bio</a>.



# **CHAPTER II:**

WHY IT MAKES POLITICAL SENSE TO SUPPORT ORGANIC AGRICULTURE



Public support to organic agriculture can be justified in many ways. Ultimately, it reflects a political choice that is influenced by many factors such as the overall political and economic situation of a country, the balance of political forces at a given moment. broader societal choices and perceptions regarding food production, or the relative power of influence of civil society movements and professional lobbies.

Scholars<sup>2</sup> have argued that state intervention (in general) can be economically justified in cases where:

- The negative effects of earlier government interventions in markets need to be corrected and eased by new interventions.
- Imperfect competition can lead to important market failure.
- A lack of information and transparency severely impedes market functions.
- Market failures arise due to the nature of the goods involved (e.g. public goods and externalities).
- Markets lead to an income distribution within a society, which is considered unacceptable.

Policy support to organic agriculture can be related to all of those reasons, ranging from correcting previous agricultural policies that have encouraged unsustainable practices, to correcting the lack of consumer information about agricultural production practices, to the generation of public goods. Adding to that is the economic justification of a national investment in a sector that has high economic potential and is internationally competitive (hence the need for a country to establish themselves in this sector).

Organic agriculture is increasingly benefiting from public support, in recognition of its contribution to societal goals, as well as its market potential. There are a variety of reasons that fall under those two broad justifications for public support. They can be summarized as follows:

#### 1. Organic agriculture contributes to the welfare of society

An important reason to justify public funds going into supporting organic agriculture is that this is a way to ensure the production of a variety of "public goods" which are not otherwise produced by conventional agriculture, and are not sufficiently remunerated by the market: those positive externalities (or external effects) include:

- Ecosystem services and environmental protection: 1.1.
  - Organic agriculture protects and enhances biodiversity and sustainable agro-ecosystems<sup>3,4,5</sup>. Biodiversity plays a fundamental role

<sup>&</sup>lt;sup>2</sup> Henrichsmever and Witzke (1994) and Dabbert et al. (2004) in Stolze and Lampkin, 2009

<sup>&</sup>lt;sup>3</sup> https://shop.fibl.org/fileadmin/documents/shop/1548-biodiversity.pdf

<sup>&</sup>lt;sup>4</sup> ftp://ftp.fao.org/paia/biodiversity/OA\_biod\_en.pdf

<sup>&</sup>lt;sup>5</sup> Sean L. Tuck and others, "Land-use intensity and the effects of organic farming on biodiversity: a hierarchical meta-analysis", Journal of Applied Ecology, vol. 51, Issue 3 (June 2014).

- in directly providing goods and services as well as in regulating ecosystem properties<sup>6,7</sup>.
- Organic agriculture supports biological pest control services and fosters ecological equilibrium<sup>8</sup>.
- Organic agriculture sustains pollination services 9,10.
- Organic agriculture preserves water quality and therefore minimizes
  the need for expensive water treatments to get potable water<sup>11</sup>.
  Additionally, organic agriculture enhances water infiltration and
  retention, thus reducing the need for irrigation and increasing
  groundwater recharge.
- Organic agriculture protects against soil erosion<sup>12, 13</sup>, desertification<sup>14</sup>, and maintains soil fertility<sup>15, 16</sup> which is the most important natural capital asset to sustain food production for future generations, and in adapting to climate change<sup>17</sup>.
- Organic agriculture contributes to carbon sequestration<sup>18</sup> and consumes less fossil energy<sup>19, 20</sup>, thereby mitigating climate change.

#### 1.2. Rural development and landscapes:

• Organic agriculture enables people in rural and less favored areas to earn a decent income and therefore helps to sustain a balanced

<sup>&</sup>lt;sup>6</sup> Porter, J., Costanza, R., Sandhu, H., Sigsgaard, L. & Wratten, S. The value of producing food, energy, and ecosystem services within an agro-ecosystem. Ambio 38, 186–193 (2009).

 $<sup>^7</sup>$  Sandhu, H. et al. Significance and value of non-traded ecosystem services on farmland. PeerJ 3, e762 (2015).

<sup>&</sup>lt;sup>8</sup> Östman, Ö., Ekbom, B. & Bengtsson, J. Yield increase attributable to aphid predation by ground-living polyphagous natural enemies in spring barley in Sweden. Ecol. Econ. 45, 149–158 (2003).

 $<sup>^9\</sup> https://www.organic-center.org/wp-content/uploads/2015/06/The-Role-of-Organic-in-Supporting-Pollinator-Health.pdf$ 

<sup>&</sup>lt;sup>10</sup> http://www.bayceer.uni-bayreuth.de/bayceer/en/pub/html/JApplEcol2007,44\_41-49.pdf

<sup>11</sup> https://www.uni-hohenheim.de/i410a/ofeurope/organicfarmingineurope-vol6.pdf

<sup>&</sup>lt;sup>12</sup> Siegrist, S., Scaub, D., Pfiffner, L. & Mäder, L. Does organic agriculture reduce soil erodability? The results of a long-term field study on loess in Switzerland. Agr. Ecosyst. Environ. 69, 253–264 (1998)

<sup>&</sup>lt;sup>13</sup> Eric Holt-Giménez, "Measuring farmers' agroecological resistance after Hurricane Mitch in Nicaragua: a case study in participatory, sustainable land management impact monitoring", Agriculture, Ecosystems and Environment, vol. 93 (2002).

 $<sup>^{14}\ \</sup>mathrm{ftp://ftp.fao.org/docrep/fao/010/y4587e/y4587e05.pdf}$ 

<sup>&</sup>lt;sup>15</sup> Wander M, Traina S, Stinner B, Peters S. 1994. Organic and conventional management effects on biologically active soil organic matter pools. Soil Science Society of America Journal. 58: 1130-1139.

<sup>&</sup>lt;sup>16</sup> http://www.emeraldinsight.com/doi/abs/10.1108/00070700910992925

<sup>&</sup>lt;sup>17</sup> http://www.redagres.org/Organic-agric.pdf

<sup>&</sup>lt;sup>18</sup> Rodale Institute, "Regenerative organic agriculture and climate change: a down-to-earth solution to global warming" (Kutztown, Pennsylvania, 2014). Available from http://rodaleinstitute.org/assets/WhitePaper.pdf.

<sup>&</sup>lt;sup>19</sup> https://organic-center.org/reportfiles/EnergyExecSummary.pdf

<sup>&</sup>lt;sup>20</sup> Tuomisto, H. L., Hodge, I. D., Riordan, P. & Macdonald, D. W. Does organic farming reduce environmental impacts? A meta-analysis of European research. J. Environ. Manage. 112, 309–320 (2012).

- territorial development of rural economies and mitigates rural-urban migrations<sup>21</sup>.
- Organic agriculture brings innovation in rural systems<sup>22</sup>, requiring higher levels of information and lower technological input.
- Organic agriculture protects the quality and the amenity of rural landscapes, preserves the natural and cultural diversity of rural settings, while improving rural well-being and meeting the multiple urban demands on the countryside<sup>23</sup>.
- Organic agriculture emphasizes participation and bottom-up approaches, which strengthen solidarity of rural communities <sup>24</sup> <sup>25,26</sup>.
- Organic agriculture is more labor intensive than conventional agriculture, and therefore sustains rural employment (job creation)<sup>27,28</sup>.
- Organic agriculture is a viable option for family farms and smallholders and therefore supports food security and food sovereignty<sup>29</sup>.
- Organic agriculture increases resilience to market and climatic fluctuations, therefore stabilizing rural income and livelihoods.
- Organic agriculture maintains more diverse and attractive landscapes and preserves natural heritage, which provides a basis for the recreational enjoyment of the countryside and for tourism development.

#### 1.3. Public health:

- Organic agriculture avoids contamination of the general environment by toxic chemicals that have an adverse effect on public health<sup>30</sup>.
- Organic agriculture helps preserve the health of agricultural workers though the avoidance of pesticide exposure.
- Organic agriculture helps reduce the overall amount of pesticide residues in food and therefore reduces the risk of chronic diseases such as cancer, Alzheimer, Parkinson or allergies<sup>31</sup>.

<sup>&</sup>lt;sup>21</sup> http://infohub.ifoam.bio/sites/default/files/page/files/rural\_development\_en.pdf

<sup>&</sup>lt;sup>22</sup> IFOAM EU Group, ARC 2020, TP Organics, 2012. *Agro-ecology: Ten examples of successful innovation in agriculture.* 

<sup>&</sup>lt;sup>23</sup> http://www.agr.unizg.hr/smotra/pdf\_68/acs68\_35.pdf

<sup>&</sup>lt;sup>24</sup> http://www.organicagcentre.ca/DOCs/org\_farmers\_rural\_dev.pdf

<sup>&</sup>lt;sup>25</sup> https://shop.fibl.org/fileadmin/documents/shop/1348-producer-initiatives.pdf

<sup>&</sup>lt;sup>26</sup> Abouleish I., Kirchgessner M.: Sekem, 2005, A Sustainable Community in the Egyptian Desert.

<sup>&</sup>lt;sup>27</sup> In Wales, the Organic Farming Scheme (OFS) was found to be the main contributor to restructuring and modernization of the agricultural sector and a contributing factor to participants remaining in farming. In France, it was estimated that organic agriculture employs 60% more people than conventional agriculture (source: Agreste Primeur n°284 - juin 2012). In Tunisia, according to the organic competent authority, organic agriculture employs 30% more people than conventional agriculture.

<sup>&</sup>lt;sup>28</sup> Prihtanti, T. M., Hardyastuti, S., Hartono, S. & Irham Social-cultural functions of rice farming systems. Asian J. Agr. Rural Dev. 4, 341–351 (2014).

<sup>&</sup>lt;sup>29</sup> http://www.fao.org/3/a-at744e.pdf

<sup>&</sup>lt;sup>30</sup> http://www.who.int/occupational\_health/publications/en/oehpesticides.pdf

 Organic agriculture reduces exposure to antibiotics and other animal drugs that are usually contained in conventional animal products<sup>32</sup>. It reduces the risk of antibiotics resistance in human pathogens - an increasingly serious public health issue.

#### 1.4. Animal welfare:

• Organic agriculture ensures good health and welfare standards for animals used for food production<sup>33, 34</sup>. Healthier animals are, in turn, less of a risk for human health (see point above).

#### 1.5. Food quality and nutrition:

- Organic products should contain no pesticides, less nitrates, less food additives, and more healthy nutrients, and therefore generally represent less of a health risk for consumers, especially children<sup>35, 36, 37</sup>.
- Organic products are generally of higher taste quality than their conventional equivalents<sup>38</sup>.
- Through diversification strategies such as intercropping techniques and crop rotation, organic agriculture favors diversification of diet.
   Diversified organic agriculture can therefore be considered "nutrition-sensitive", helping to reduce malnutrition in poor rural populations.

Hence, the political justification for supporting organic agriculture lies in the multifunctionality of this sector. While under current policy structures its function of food production is remunerated by the market (and by general agricultural subsidies) all the other "public good" functions mentioned above must be remunerated through specific public support mechanisms. All the positive externalities of organic agriculture, and the need to reduce negative externalities of conventional agriculture, justify permanent support to the organic agriculture sector, as a cost-effective way to internalize externalities. For example, in the town of Munich, it was estimated that developing organic agriculture around the water catchment areas costs 27 times less than denitrification costs. Policy support is a way to reach social optimization of agricultural systems, which could not be achieved by market forces alone. The concept of "true cost accounting" is particularly relevant in this regard.

<sup>&</sup>lt;sup>31</sup> Leu A., 2014, *The Myth of Safe Pesticides*.

<sup>&</sup>lt;sup>32</sup> Smith-Spangler, C. et al, 2012, *Are organic foods safer or healthier than conventional alternatives?* 

<sup>&</sup>lt;sup>33</sup> Gray, D. and Hovi, M., 2001, *Animal Health and Welfare on Organic Farms*. Organic Livestock Farming. Chalcome Publications.

<sup>&</sup>lt;sup>34</sup> Weller, R F and Cooper, A, 1996, *The health Status of Dairy Herds Converting From Conventional to Organic Dairy Farming.* IGER

 $<sup>^{35}</sup>$  Barański M. et al., 2014, Higher antioxidant and lower cadmium concentrations and lower incidence of pesticide residues in organically grown crops: A systematic literature review and meta-analyses, British Journal Of Nutrition 112(05): 1-18  $\cdot$  June 2014

<sup>&</sup>lt;sup>36</sup> Human health implications of organic food and organic agriculture, Science and Technology Options Assessment, European Parliamentary Research Service, Scientific Foresight Unit

<sup>&</sup>lt;sup>37</sup> Lu, C. et al., 2006, *Organic diets significantly lower children's dietary exposure to organophosphorus pesticides*. Environ. Health Persp. 114, 260–263 (2006).

<sup>38</sup> https://organic-center.org/reportfiles/Taste2Pager.pdf

True cost accounting studies are starting to demonstrate, in monetary terms, that overall organic agriculture costs society less than conventional agriculture. If the negative externalities of conventional agriculture were internalized in the price, conventional products would be more expensive than organic ones.

The right policies would have the power to optimize public welfare by incentivizing farmers to produce positive externalities of high societal value and reduce the negative externalities. You can learn more about true-cost accounting in food systems on the website of the <u>Sustainable Food Trust</u>.

#### 2. Organic agriculture is an infant sector with high market potential

Another important economic justification for public support to the organic sector, under the neoclassical economics paradigm, is the "infant industry argument". This argument is based on the fact that organic agriculture is still a very small sector that has not yet achieved the economies of scale that will enable it to efficiently compete with conventional agriculture, or on the global organic trade market. Also, increasing consumer demand for organic products means that the sector has high growth potential but needs some initial support to be able to structure itself to the scale that will allow it to fulfill this demand.

At early stages of development of the organic sector, there are a number of structural and behavioral obstacles that hinder the development of organic supply chains. These are particularly:

- The lack of market information and lack of adequate distribution channels.
- The absence of well-functioning professional organizations coordinating the needs of the organic sector.
- The lack of support services, such as advisory services, input suppliers, etc.
- The risk-averse behavior of farmers and other actors in the food chain, limiting transition to organic systems (even if they are performing economically better).
- The fear of peer pressure and social exclusion of farmers if they convert to organic while their neighbors and other members of professional associations are all conventional.
- The small scale of the sector is a hindrance for retail uptake and is not motivating research, academia and politicians to pay attention to it.

It can take many years of temporary public support to invest in research & development, build organic sector organizations and supporting institutions, and structure the organic supply chain to mainstream organic products into normal distribution channels where they become fully accessible to all consumers.

Temporary public investment into the infant sector of organic agriculture and food systems is therefore a way to achieve a variety of political objectives, including:

- Ensuring the ability of the market to fulfill upcoming consumer demands (and potentially substitute organic imports with domestic production).
- Developing an internationally competitive industry that will ensure foreign exchange revenues (through interesting premium prices and/or through securing a special place on world markets).
- Transitioning to an agri-food system that is less dependent on agrochemical imports, and is more resilient.

#### 3. The main logics of policy intervention in the organic sector

Depending on the relative importance, at the national level, of the various political reasons listed above (whether societal welfare reasons or growth investment reasons), different types of public support to organic will be less or more appealing to policy makers. There is a complex reality of intertwined objectives. However, they can be simplified and grouped into four broad categories of the most common logics of policy intervention in the organic sector, which are the following:

- a) The government wants to build a commercial organic sector as a strategy to gain export markets and earn foreign currency. This is often combined with the fact that this export market relies on production that is well suited for poor family farms. Therefore, enabling them to access high value export markets is both a way to earn foreign currency, and reduce rural poverty.
- b) The government wants to ensure societal welfare optimization by addressing the problem of externalities in agriculture. In other words, it wants to encourage the production of positive externalities (environmental and societal benefits of organic agriculture) and wants to avoid negative externalities (hidden costs of conventional agriculture for the society).
- c) The government wants to increase self-sufficiency in the organic sector, i.e. reduce organic imports: this can be the case in a situation where the country is a large importer of organic food and yet its own domestic production is lagging behind.
- d) The government wants to increase access to healthy food products for all citizens: for citizen equality, the government would like that not only an elite have access to organic food, but potentially every interested person.

These logics are not exclusive: a government's drive to support the organic sector may combine several of these reasons. The <u>Decision-helping framework</u> gives guidance on the relevance of various policy measures depending on political priorities. Notes on the relevance of different policy measures are also given under the "suitable contexts" section of each measure detailed in Chapter V.



CHAPTER III: HISTORY AND OVERVIEW OF PUBLIC SUPPORT TO ORGANIC AGRICULTURE GLOBALLY



Looking at the major growth factors for organic agriculture, it becomes clear that government intervention can play a critical role. Most of the time, sector growth is a result both of policies conducive to growth and a particular dynamism in the private organic movement. However, there are states in which the effect of government policies and programs on organic sector growth has been the decisive factor in accelerating this growth, for example Tunisia, Austria, Czech Republic, the state of Sikkim in India and Bhutan. Saudi Arabia is another example of government-driven organic growth, but with a focus on consumption.

The EU is a case of mixed factors: the region has dynamic private organic movements, but it also has had a conducive policy environment. Meta studies done on the topic of the use and efficiency of EU policies in favor of organic agriculture have shown that policy matters – a lot. The quantitative and qualitative analysis showed that public support for the organic sector is the major driver for organic sector development and the sector has developed within the framework of state intervention<sup>39</sup>. However, the analysis has shown that public support measures do not act alone and may have little impact if other non-public support factors are absent. Environments supportive to organic farming are those in which organic businesses are economically viable and represent a well-functioning competitive industry, where the public is positive towards organic, where the organic movement is strong and well organized, and where there is a positive market environment so that organic operators see market prospects, and where all actors investing in organic business have confidence in policies. These factors considerably influence the development of the organic sector.

Recent research<sup>40</sup> shows that governmental organic farming support has a significant impact on the development of the number of farms and organic area. Some studies have also found that, in the UK and Denmark, the provision of organic extension as well as marketing support correlates positively with the number of organic farms and the area under organic management.

In some countries, organic production has developed significantly despite the near-absence of supportive organic policies (beyond mere regulation), for example in Argentina, Peru or Uganda (although in the last two, foreign donor support has been very important), but those countries are mostly exporters of organic raw materials. They do very little value addition and have a low level of domestic demand for (and consumption of) organic products.

Below, we detail further the history of public support in some of the world's regions.

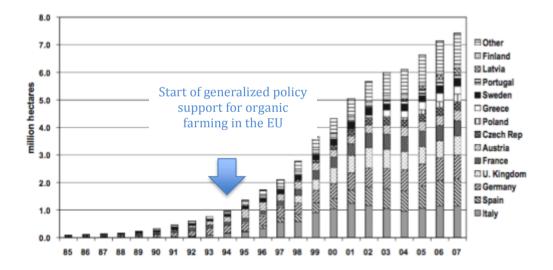
<u>Europe</u>: Europe has been the front-runner in terms of public support to organic agriculture, both in the EU and other European states. The first scheme specifically targeted at organic farming was introduced in Denmark in 1987, followed by other countries such as Austria and Switzerland. As part of the reform of the EU Common Agricultural Policy (CAP) in 1992, the introduction of agri-environment programs provided a unified framework for supporting conversion to and maintenance of organic

 $<sup>^{39}</sup>$  Sanders at al, 2011, Use and efficiency of public support measures addressing organic farming.

<sup>&</sup>lt;sup>40</sup> Daugbjerg et al., 2011; Lesjak, 2008; Bahrs and Held, 2006

production across the EU. These conversion and maintenance area payments started in 1994 across the EU and have constituted the cornerstone of public support to organic agriculture since then. During this period, supporting organic farming was a means to an end and not a policy goal itself. Towards the end of the 1990s, however, the importance of organic farming in the context of the CAP shifted. Due to changing policy, economic and societal framework conditions, organic farming goals and CAP goals increasingly converged. Although a wide variety of measures were developed to support the promotion of the organic food sector (all under the agri-environmental programs of the CAP), organic area payments<sup>41</sup> remained the main instrument, when judged from the overall level of financial expenditure. To give an idea of the scale of support given to organic farming in the EU-15 during this period, in 2001, organic farming was supported across the EU within the agri-environmental programs, with a budget totaling EUR 520 million for that year<sup>42</sup>.

The impact of these organic agriculture policies on the growth of the organic sector in the EU is generally considered to have been very significant. The graph below illustrates this:



**Figure 1: Certified organic and in-conversion land area (M ha) in Europe, 1985-2007** *Source: Policy for organic farming: Rational and concepts, Stolze M. and Lampkin N., 2009* 

In the new EU CAP for 2014-2020, the role of organic farming is recognized as a way of farming that responds to consumer demand for more environmentally-friendly farming practices. In line with the motto "Public money for public goods", the new CAP 2014-2020 makes organic farming more visible and confirms its role as a measure for providing public goods<sup>43</sup>. As a result, the expansion of organic farming has itself become

 $<sup>^{41}</sup>$  Fixed subsidy per ha given to organic producers depending on the type of crops they grow – see Chapter V, section 2.e. for more details.

<sup>&</sup>lt;sup>42</sup> Häring et al., 2004, *Organic farming and measures of European agricultural policy*. Organic Farming in Europe: Economics and Policy, Vol. 11.

 $<sup>^{43}</sup>$  For example, under Pillar  $^{143}$  of the CAP, organic farms automatically receive the Greening component without having to fulfill further obligations. Also, under Pillar  $^{243}$ , Organic farming is more prominent

a policy goal in several EU countries, and policies to support organic farming are now widely applied in many EU countries. The total budget specifically allocated to organic agriculture in the CAP 2014-2020 (under measure 11) is set at EUR 6.3 billion in the EU-28. Additionally, the organic sector may benefit from a number of the other measures, to which they are sometimes given priority access.

North America: Public policies towards the organic sector in Canada and the USA have focused mainly on fostering orderly markets and public confidence in the organic label through regulation and enforcement. Governments do not officially recommend organic agriculture for achieving broader policy goals, and avoid the appearance of giving preferential support to the organic sector vis-à-vis other agricultural sectors. On the other hand, these governments have implemented measures to ensure that the organic sector and its operators are accommodated on an equitable basis in other programs. In a span of several years the USDA has: increased budgets for organic agriculture research, adjusted its risk management (crop insurance) program to reduce barriers to access by organic farmers, and introduced more organic data collection and dissemination. Canada supports organic market promotion through an organic roundtable, which is one of 15 such working groups on specific agricultural sub-sectors.

<u>Africa:</u> Tunisia is by far the organic policy leader in the African continent, and a radical example of government-led sector growth within the context of an export-focused organic value chain:

#### Tunisia: the African success story of government-led organic export sector growth

The Tunisian government has taken a very pro-active role in supporting the growth of the organic sector over the past 20 years. Organic agriculture started in Tunisia in the mid 1980s in response to the demand for organic products from Europe. However, until 1997, organic agriculture was limited to a few private initiatives and the government was not aware of the potential of this sector.

It was after some international exchanges, particularly between a few Tunisian agronomy professors and French organic farmers, that Tunisian public institutions became interested in organic agriculture. Discussions between the professors and staff from the Ministry of Agriculture culminated in 1997 in the organization of a workshop followed by several other conferences. These events heralded government support for the organic sector because it could help achieve some of the national agriculture policy objectives, particularly improving farmers' income and export revenues.

Soon after these events, government support to organic agriculture materialized into explicit support measures. A commission was established to investigate the potential of organic agriculture for Tunisia. This led to the formulation of a draft organic law that went through months of stakeholder consultations involving both non-government stakeholders and several government agencies. The law on organic agriculture was enacted in 1999, covering both organic regulation aspects and organic support measures. The law and a series of complementary decrees resulted in an institutionalization of organic agriculture, as well as

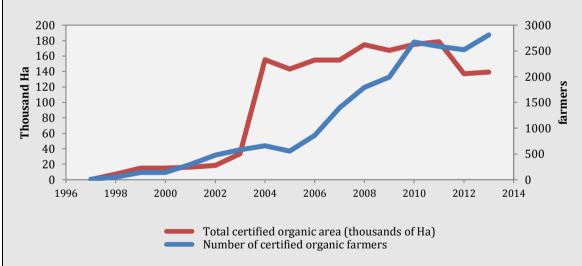
under the new Rural Development Regulation (EU) No 1305/2013 with specific mention of support for organic farming conversion and maintenance payments (Article 29), Investments (Article 17), Quality schemes (Article 16) and EIP-AGRI (Title IV).

considerable public investments into organic research and extension at a very early stage of development of the sector. In particular, a number of specialized central and regional level administrative government agencies and technical institutions were created through the decrees of 1999, among which are the National Commission for Organic Agriculture and the Technical Centre of Organic Agriculture.

In 2004, Tunisia developed its first national organic action plan with funding support from FAO. This plan, implemented from 2005 to 2009, was rooted in the country's broader Economic and Social Development Plan. After a review of the sector situation at the end of the first action plan implementation, a second national organic action plan (2010-2014) followed. Again, this plan was linked to the broader Economic and Social Development Plan for that period. In particular, it made reference to the objectives related to food security, increasing exports of agri-food products and conserving natural resources. To achieve those objectives, increasing organic production volumes, diversity, quality and value addition were the particular focus of the organic plan. The action plan had clear annual targets such as areas under organic management. Market development, both international and national, was another component of the plan. The plan was backed up by a series of support measures including budget allocations to organic institutions, subsidies for operators and investors, and governmental projects.

Government efforts to support organic agriculture in Tunisia have paid off. Private investors responded to the policy measures by investing massively in the organic sector. Between 2005 and 2010, about  $\in$ 5.3 million per year were invested in the sector. In 2012, investment in the organic sector reached  $\in$ 7.59 million, representing more than 52% of the total investment in the Tunisian agriculture sector for that year.

The number of farmers, the certified organic areas and the export revenue from organic products underwent an impressive growth over the decade that followed the start of government support.



**Fig. 2:** Number of Certified Organic Farmers and certified organic area in Tunisia between 1997 and 2013 *Sources: Ben Khedher and Belkhiria, 2006; FiBL-IFOAM, 2012, 2013, 2014 and 2015.* 

The value of organic exports also increased, from EUR 7 million in 2004, to EUR 35 million in 2008 and to around EUR 140 million in 2015.

Several factors explain the success of the Tunisian government intervention in the organic sector:

- The law provided clearly defined and well-coordinated roles for specialized organic agriculture institutions.

- The organic sector action plans were developed through extensive consultative and collaborative processes including private and government stakeholders. The actions plans were comprehensive, clearly structured and designed in ways that allowed them to be continuously evaluated and updated.
- The linkages of the organic plans to some of the specific objectives in the broader plans of the country have helped ensure political and financial commitment toward their implementation.
- Well-established and highly mobilized public institutions ensured that plans were implemented.

Tunisia is however an exception in Africa. For the rest of the continent organic agriculture has not received significant public support (rather the opposite, with support for non-organic inputs such as fertilizers, pesticides and GMOs undermining organic development efforts). However, in 2011 the African Union published an expression of general support to organic agriculture<sup>44</sup> (which provided the framework for significant foreign donor support) and more recently, a pro-organic program is being developed by the Moroccan government.

<u>Latin America</u>: In Latin America, public support to organic agriculture has also been largely nonexistent, and countries have put the main emphasis on organic regulations rather than on organic support policies. Exceptions are Cuba, Costa Rica, Brazil and more recently Mexico.

Although African and Latin American governments have not invested a lot of their own resources in organic agriculture development, it does not mean that the sector has developed purely out of private investments. Many local NGO initiatives in those regions have managed to attract foreign aid in the form of organic agriculture development projects. In that sense, development partners have filled a role that the national governments have not been willing or able to fill.

Asia: In Asia, historically the level of support for organic agriculture has been low, except in South Korea. In the past few years, this situation has changed and a few states have started to set up proactive support policies and programs in favor of organic agriculture, for example the Philippines, Bhutan, several Indian States (particularly Sikkim, Kerala, and Karnataka), and Taiwan. The state of Sikkim is the first state in the world to have achieved full organic status, following a decade of pro-active organic policy intervention (see text box below). The Indian central government has recently initiated some organic development programs, particularly for the Northeastern region. Additionally, organic-compatible policy efforts are underway to phase out agrochemicals and promote organic fertilizers in certain countries, such as Indonesia (Bali) and Sri Lanka. However, in most other Asian countries, the public sector is doing very little to encourage organic, and this includes Russia and all former Soviet Union countries in Central Asia.

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<sup>&</sup>lt;sup>44</sup> See the African Heads' of State Decision EX.CL/Dec.621(XVIII) on organic farming available at <a href="http://www.kilimohai.org/fileadmin/02">http://www.kilimohai.org/fileadmin/02</a> documents/EOA/AFRICAN UNION RESOLUTION ON ORGANIC FARMING.pdf

#### Sikkim: The first fully organic state

#### A success story of policy-driven conversion to organic agriculture

Sikkim, a small Himalayan state located in Northeast India, is well known for its scenic beauty and as a biodiversity hotspot. Its fragile, hilly ecosystems require sustainable farming practices to preserve the natural capital. The state produces a variety of crops due mainly to varied agroclimatic conditions ranging from subtropical to alpine. Tourism is a growing economic sector.

Political commitment to organic agriculture in Sikkim started in 2003. At that time, the state's agriculture faced serious environmental and health problems due to chemically intensive agriculture. As a solution, the Chief Minister of Sikkim, Pawan Chamling, announced his vision for Sikkim to be India's first organic state. In a historical declaration to the State Assembly in 2003, Chamling announced "a long awaited policy initiative of declaring Sikkim as a Total Organic State". This was the first such far sighted and visionary policy commitment of a state in India or indeed the world. Pawan Chamling has been Chief Minister of Sikkim since 1994, having won the legislative assembly elections for 5 terms in a row. This has provided Sikkim the political stability to implement the organic vision in just a little more than a decade.

The 2003 declaration was accompanied by the creation of the "Sikkim State Organic Board" and by an action plan containing a variety of policy measures, including a gradual increase of taxation on chemical fertilizers and pesticides, stopping synthetic fertilizers and pesticides from being imported from outside the state, supporting the production and use of organic fertilizers and organic seeds, and capacity building for extension officers, farmers and young people.

From 2006 onwards, a number of pilot projects on organic group certification involving thousands of farmers were implemented in cooperation with NGOs, service providers (for setting-up the Internal Control Systems) and certifiers.

In 2010, the Chamling government launched the Sikkim Organic Mission with a clear road map and target of converting 50,000 hectares of land, thereby bringing the entire state to organic status by 2015. Under the Sikkim Organic Mission, a number of actions to support organic agriculture were implemented, including capacity building, organic seedling provision, the setup of a Sikkim organic retail outlet in New Delhi, and the inclusion of organic farming in school curriculum.

In 2014, the Sikkim government adopted a State Policy on Organic Farming, which was accompanied by a five-year plan for 2013-2018 formulated by the Sikkim Organic Mission.

Sikkim achieved full organic status ahead of schedule in December 2015. This success was widely communicated in India and worldwide. The Sikkim tourism sector benefits from this image. Resorts market themselves as completely organic where tourists can pick, cook and enjoy fresh organic food from kitchen gardens.

The success factors of this rapid state conversion to organic farming have been analyzed as follows:

- The five consecutive reelections of the Chief Minister Chamling allowed him to oversee the entire process.
- Farmers had time to prepare for the change and support to do so, including investments in capacity building and input provision.
- There was a compulsory conversion strategy: the state gradually banned chemical pesticides and synthetic fertilizers. Enforcement included fines and potential jail time for those breaking the law.
  - The state communicated clearly about its intent and got its people on board.
- The state is small and culturally homogeneous. Many of the farmers already had knowledge of traditional, organic ways of farming.

In January 2016, the Prime Minister of India, speaking at the inauguration of the Sikkim Organic Festival, encouraged other states in India to follow Sikkim's example. "Sikkim has shown the way and what we are seeing today is the result of tremendous hard work and belief in an idea."

<u>Middle East:</u> In the Middle East (excluding Tunisia), Saudi-Arabia is clearly the leader in terms of pro-organic government intervention, with more than a decade of government-funded organic farming development programs implemented with the technical assistance of GIZ International Services.

<u>Oceania:</u> Australia and New Zealand generally do not intervene in the agriculture sector, and therefore do not show any pro-organic policies. Political interest for organic agriculture is emerging in the islands of the Pacific Community where there are a few interesting initiatives.

Overall, the gradually growing political interest, on various continents, in supporting organic agriculture, whether from a production or from a consumption point of view, is a noticeable trend. However, outcomes will be influenced by the competition for public funds between various agricultural systems (mostly organic and conventional) and the entrenchment of various supports for conventional systems.



## **CHAPTER IV:**

DETERMINING THE RIGHT MIX OF SUPPORT MEASURES: NATIONAL/REGIONAL ACTION PLANS AND GUIDELINES



This chapter provides recommendations concerning the clustering of pro-organic policies and actions into comprehensive plans such as organic action plans and other documents serving similar purposes. It is worth putting organic support in a broader context, showing that organic development is not the goal in itself but a tool to reach broader policy goals.

Approaching the issue of organic policies through an organic action plan will require the engagement of various stakeholders, commitment across several ministries, suitable budget allocations and ensuring coherence with other national policies and action plans that concern the agricultural sector and/or rural development more broadly.

Many governments have developed approaches to supporting organic agriculture, which are variously called policies, strategies and plans/action plans. Except for certain political declarations, these approaches are the result of a planning process. In these guidelines, the term *policy* is used flexibly, but mainly with reference to the general pathways in which governments translate their visions and broad goals into legislations, programs, and budget allocation. Some governments have issued broadly stated organic agriculture policies, leaving the planning of concrete actions for subsequent policy processes. It is a matter of governance style and tradition if the policies themselves will include detailed actions or if the policy is more general and concrete actions are formulated in an action plan, policy decrees or other instruments. It also relates to the decision-making processes involved. If the policies are set in parliament, it is generally better to have the action plan separate and approved by the relevant Ministry or the Government.

In these guidelines "*strategic plan*" refers to a comprehensive document describing the aims (goals) and related policies, and the strategic actions for going from the present situation towards achieving the aims and implementing the policies, often over a specific time period. The hallmark of the strategic plan is the plan for specific actions that will be taken to effect the desired change.

#### 1. Why a national/regional organic action plan?

As shown in subsequent chapters of this document, there is a large array of policy measures and other forms of public support, which can be used at various levels of administration (e.g. inter-governmental, national, regional, municipal). There is a high interdependency among single policy measures addressing the organic sector. Policy packages are more relevant than the sum of individual policy measures and appear to be more effective if they are embedded in the general policy environment, contain strategic goals and consider directly the needs of the sector, in other words, if policy measures are packaged into an organic action plan. Choosing the right mix of appropriate, cost-effective measures in a given context requires a strategic planning exercise, of which the organic action plan is the outcome.

Organic action plans provide a framework for integrating policies and measures in order to encourage organic sector development. Thus action plans serve as a strategic instrument for governments to achieve policy goals, particularly when multiple policy

areas (such as agriculture, environment, trade) and different levels of policy formulation are to be integrated. Action plans can avoid contradictory policies while also ensuring that the different measures are complementary.

Organic Action Plans often include targets for adoption, as well as a combination of specific measures. The more detailed plans contain evaluations of the current situation and specific recommendations to address issues identified, including measures to reduce conflicts between different policy measures. Any Organic Action Plan is a political compromise reflecting tensions and diverging interests of government and various stakeholders.

Action plans are usually done at the national or regional level. For example, in 2004, the EU published its first European Action Plan for Organic Food and Farming (EOAP). In 2014, the EU Commission adopted the second EOAP. In the EU alone, a total of 17 national and 10 regional action plans or similar support schemes were implemented between 2007 and 2011<sup>45</sup>. In 2015, out of 31 countries in Europe, 12<sup>46</sup> had national (or several regional) organic action plans for the period<sup>47</sup>. In India<sup>48</sup>, many states have developed national organic action plans and policies. Other countries (or group of countries) that have developed an organic action plan/strategy/program include the African Union, Brazil, Costa Rica, Nicaragua, Canada, Indonesia, Kyrgyzstan, The Philippines, or Turkey. Some of these are comprehensive plans and others are focused on one or a few aspects of support (such as Canada's organic brand development process).

Developing a comprehensive national/regional organic action plan takes time (several months to a couple of years) and some resources. However, it is a worthwhile exercise because:

- It creates and catalyzes a positive local dynamic around organic agriculture development.
- It encourages an analytical starting point, looking at the current situation of the domestic organic sector, and therefore addressing the local situation rather than trying to replicate policy blueprints of other countries, which may not be appropriate.
- It encourages policy makers and other actors of the sector to adopt a more comprehensive and strategic, and therefore more effective approach to organic support, than leaving single policy measures to be discussed and adopted in isolation.
- It provides the framework for a constructive public-private cooperation and organized stakeholder involvement in policy formulation.
- It constitutes a clear government-supported statement of the major societal

<sup>&</sup>lt;sup>45</sup> Sanders at al, 2011, Use and efficiency of public support measures addressing organic farming.

<sup>&</sup>lt;sup>46</sup> Those are Austria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Hungary, Ireland, Luxembourg, Poland, and Slovenia.

<sup>&</sup>lt;sup>47</sup> The list, together with links to the various national plans, is available in annex of the 2015 IFOAM EU report "Organic Action Plans – A Guide for Stakeholders".

<sup>&</sup>lt;sup>48</sup> Including Himachal Pradesh, Uttarakhand, Maharashtra, Kerala, Gujarat, Madhya Pradesh, Nagaland, Sikkim, Mizoram, Karnataka, Uttarakhand and Arunchal Pradesh

benefits of organic farming and contributes to the expression and visibility of medium and long-term government commitment to organic support, which is a crucial signal for the private sector to invest.

It is often not too difficult for developing countries to secure resources to conduct such a planning process. Several developing countries (e.g. Serbia, Costa Rica, Nicaragua, Paraguay, the African Union, Bhutan, Kyrgyzstan, Tanzania, Uganda) financed the development of their national organic action plans in the context of a development cooperation project. It is important that there is solid political support for this process. If the process is externally funded, the risk increases that the plan will sit on the shelf (as has already happened in several countries).

### Example: The Philippines National Organic Program: from legislation to local implementation

#### Legislation

A piece of legislation known as the Organic Agricultural Act of 2010 (Republic Act 10068) laid the foundation for a strategic national plan for organic agriculture for the period 2012-2016. The Act established a structural framework and financial appropriation for comprehensive support for building the organic sector, which includes but is not focused on standards and regulation. It also set some directions for the types of support that must be offered: tax incentives, production support, research etc. The Act also set some requirements for the process of sector support, especially implementation at the provincial and local levels. Significantly, the Act called for a multi-agency, multi-stakeholder National Organic Agriculture Board (NOAB), attached to the Department of Agriculture and comprised of representatives of eight government departments/bureaus and representatives from the NGOs, academic institutions and private sector. The NOAB was empowered to develop and oversee the Implementing Rules for the Act.

#### **NOAB:** an Implementing Mechanism

The structure and mandate of the NOAB facilitated collaboration across member agencies including Agriculture, Interior and Local Government, Environment and Natural Resources, Agrarian Reform, Health, Science and Technology, Education, and Trade and Industry. It also ensured transparency and consultation as the NOAB worked through several steps toward establishing and implementing a strategic action plan. The initial mandate of the NOAB was to prepare the Implementing Rules and Regulations for the Agricultural Act, which was approved as an administrative order in early 2011. The order established the National Organic Agricultural Program and called upon government units at all levels and organizations in the organic sector to submit their own sector development plans to the NOAB to foster the development of a "bottom up, multi-disciplinary and multi-sectorial participatory planning, monitoring and evaluation system." The Bureau of Agriculture and Fisheries Product Standards was designated to provide the Board's Secretariat and implement a consultative process for preparing an action plan, to include provisions for localized consultation and implementation.

#### Drafting and Consulting the Action Plan

The aim of the Action Plan was to translate the legislative format of rules to a planning format amenable to monitoring and evaluation. The aim was a holistic and comprehensive five-year program. The NOAB established a Technical Working Group to conduct consultations on the main islands of the Philippines, including provincial and local governments, farmers and other

sector actors. A progress report on the draft was presented at the Philippines Organic Agriculture Congress in 2011.

The action plan, called the National Organic Agricultural Program, was finalized in January 2012. The unit by the same name, National Organic Agricultural Program, within the Department of Agriculture administers and monitors program implementation including at provincial and local levels, and publishes periodic implementation reports and assessments.

#### **Program Characteristics**

The following public goals are given for developing the organic sector:

- Better farm incomes and sustainable livelihoods
- Improved health of the people
- Environmental protection
- Disaster risk reduction and resilience to climate change
- Social justice.

The goal for the National Organic Program was to have 5% of agricultural land under organic cultivation by 2016.

Guiding concepts for its formulation include the following:

- Multistakeholder processes
- Public-private partnerships for implementation
- Cost-sharing with beneficiaries
- Integration/convergence with other development policies
- Systems approach to plan design.

#### **Program Concept and Components**

The program's main components are:

- Institutional development
- Research and development
- Production and technology support
- Extension and capacity building
- Promotion/advocacy/education
- Market development

#### **Results and Impacts**

By 2015, the Philippines had 343,387 hectares of organic agriculture area and 116,558 farmers. This compares to a baseline in 2006 (the earlier year for which data is available) of 14,140 Ha under organic management (0.12% of agricultural land) and 35,000 organic farmers. The target of 5% agriculture land by the end of 2016 was for 483,540 Ha.

To see an example of results at the local level, click <a href="here">here</a>.

#### 2. How to develop an organic action plan?

The impetus to develop an organic action plan may either come from the government (top-down) or from the sector (bottom-up). Often but not always the first initiative to develop an organic action plan comes from government. Examples of countries that

have developed organic action plans on the basis of top-down initiatives are: Denmark (1998), Germany (2001), Czech Republic (2002), Slovenia (2004), Tunisia (2004), The Philippines (2012), Sikkim (2013), and Hungary (2014).

There are also cases where the national organic movement or the private sector, when sufficiently organized (e.g. within a national umbrella organization), is the one initiating the organic action plan process. For example, in the EU, some Action Plans were developed on the basis of bottom-up initiatives (e.g. Andalusia 2001, Italy 2001, Netherlands 2004); i.e. the sector itself demanding political action designed by the sector itself to help solve sector problems. Sometimes, in developing countries, strategic planning can be organized by national associations with support from foreign donors.

Regardless of who initiates the process, the development and implementation of organic action plans should be seen as a partnership between policymakers, the organic sector, and other concerned stakeholders (e.g. interested businesses, consumers, sector organizations). It seeks to respond to the needs of organic food and farming in a specific country and region while contributing to wider policy objectives.

The process of developing a national organic action plan may follow the traditional policy development cycle. This "policy cycle" involves a series of linked phases or stages including policy design, policy formulation, decision-making, implementation, and evaluation. Preparing an Organic Action Plan will generally take 12-18 months. The duration of the implementation period varies considerably, from one to up to eight years.

The development of organic action plans is a complex exercise. It should contain at least the following steps:

- 1. Analyzing the current situation of the organic sector and its development needs.
- 2. Establishing the aims/goals and objectives of the action plan
- 3. Identifying appropriate policy measures to address the aims and objectives.
- 4. Deciding on the measures and allocating budgets.

**Stakeholder involvement** is a crucial condition to the development of a good organic action plan. Stakeholder involvement is more likely to become successful if it uses several methods and runs throughout the policy cycle of an Organic Action Plan (design, policy formulation, decision making, implementation and evaluation). Methods for stakeholder involvement include: electronic consultations, creation of committees and expert groups, workshops, surveys, etc. Case examples of stakeholder involvement and public-private collaboration on organic policy are presented in a 2014 <u>UNFSS</u> <u>Discussion paper</u>.

It is important to ensure that the process is inclusive and represents a balance of interests. Special attention is needed to ensure participation of (smallholder) farmers, women farmers, indigenous people or other possibly marginalized groups. Some measures to achieve such balance and inclusiveness include:

o Relying on identified interested stakeholders to identify and reach out to other

- groups that may not have been originally considered.
- o If necessary, ensuring targeted financial support for key civil society stakeholders (e.g. NGOs, cooperatives, SMEs, farmer associations) to enable their active participation (this could be in the form of a project, or similar).
- If necessary, organizing some capacity building activities for stakeholders (and government representatives) on organic issues prior to commencing the policy formulation process, so that they are empowered to make a meaningful contribution.

The various steps in the development of an organic action plans are presented in more detail below.

### a. Analyzing the current situation of the organic sector and development needs

Accurate data and deep understanding of the current situation of the organic sector and its context, is essential before engaging in a strategic planning process. An in-depth analysis of the following elements is recommended:

- The status of organic production, markets and other aspects relevant to the sector.
- The various stakeholders.
- The relevant bottlenecks for further development in a region or country (both on the side of production and on the side of demand).
- The specific economic, environmental and societal potentials of organic farming,
- The interplay of existing different organic support policies.
- An analysis of current national policies in relevant sectors (agriculture, rural development, environment, public health, trade, etc.), the goals they define, and how organic agriculture support can be strategically positioned as contributing to these goals.
- The extent of prior policy initiatives in support of organic food and farming (if any) including the outcome of completed evaluations (especially evaluation of previous organic action plans if any).
- The potential impact of other policy measures or policy strategies (agricultural policy and other policy areas) on the organic sector see Chapter VI.

Experts can be hired to prepare a study of the sector's situation and its potential. This can consist, for example, of a local study with data collection and key informant interviews to determine the sector's situation and its industry competitiveness potential. Value chain analysis by qualified experts may also provide the basis for developing realistic elements of an industry competitiveness strategy. In complex policy environments, expert analysis will also be required to identify and summarize the main policies having a significant impact on the organic sector, and the policy objectives that are relevant to the organic sector.

Once the situation analysis has been prepared, a workshop or similar event involving stakeholders can be conducted to discuss and build upon the study's results. A

facilitation process can be used to collectively investigate the strengths and weaknesses of the organic sector and the opportunities and threats that impact on the current state and future development of the sector – i.e. to conduct a SWOT analysis. Strengths (and weaknesses) are those features of the organic sector that distinguish it positively (or negatively) from other sectors in the economy (such as conventional agriculture) or from organic sectors in other countries. Weak points are the bottlenecks to the further development of organic agriculture (what are the most limiting factors for the sector). Opportunities (and threats) are developments outside the influence of those seeking to develop the organic sector but are likely to influence organic farming. Opportunities can be utilized (or missed) and threats can be avoided or mitigated by taking appropriate action.

For an example of a SWOT analysis of a national organic sector (Macedonia), click <a href="here">here</a>. To see how the SWOT analysis informed the development of the 2007 Macedonia Action plan, click <a href="here">here</a>.

# b. Establishing aims/goals and objectives

When the needs and potential for developing the organic sector have been defined, the aims of the Action Plan can be established.

Aims (goals) identify broad ends that the government and the sector want to achieve. From a policy-maker's perspective, the development of the organic sector is more a means to an end in pursuit of societal level objectives, not an end in itself, whereas organic sector stakeholders are more likely (but not exclusively) to see the development of the organic sector as an end in itself. Thus, reconciling the interests of different stakeholder groups is central to the development of Organic Action Plans. Two sets of aims may be included in the action plan: 1) Overview of broader policy goals to which growth and improvement of the organic sector will make a positive contribution and 2) Aims for the development (growth and improvement) of the organic sector, which usually includes quantitative targets (such as number of producers, organic land area, export values, and domestic market size and share).

Objectives describe what should change in order to achieve the aims for the organic sector. A reasonable criterion for selecting objectives is that they should respond to the needs – as defined by weaknesses (internal to the sector) and the threats (external to the sector). They should also attempt to exploit the potentials – as defined by the strengths (internal to the sector) and the opportunities (external to the sector). Examples include increasing capacity of farmers in organic farming practices, reducing the risks of converting to organic farming, increasing consumer awareness of organic agriculture and products, or increasing uptake of organic products in the hospitality sector. Aims and objectives should be measurable, to provide a basis for the evaluation of the plan's implementation.

# Example of aims/goals and objectives in an organic action plan (hypothetical)

# Aims/goals of support to the organic action plan:

- 1. Contribute to the environmental protection and sustainability in agriculture on the national territory by increasing agricultural land under organic management by 25% during the period of the plan).
- 2. Develop market opportunities for the nation's farmers and businesses by increasing organic exports by 20% and the domestic market share by 15% during the period of the plan.
- 3. Improve the nutrition and health of the nation's people by increasing the national market share of organic food sales by 15% during the period of the plan.

*Objectives* (Based on SWOT outcomes, these could also be expressed as quantitative targets):

- 1. All farmers can receive advice on organic agriculture systems and practices from the national agricultural extension service.
- 2. Farmers have financial incentives for converting to organic agriculture.
- 3. Research on organic agriculture is equitably supported.
- 4. Tax policies provide disincentives for the use of conventional pesticides and fertilizers.
- 5. Special support is given to organic businesses for export marketing.
- 6. Consumer awareness about organic food and agriculture is increased.
- 7. Data on organic agriculture and markets is available.

It is important to ensure that monitoring and evaluation (M&E) issues are addressed appropriately from the outset and that resources are allocated for them. Indeed, M&E will be an essential element to steer implementation and will serve as an input in the next action plan design phase. Responsibility for monitoring should be clarified in the plan and preferably rest with one coordinating body. Setting targets in the action plan is not only useful for the M&E, but also to express the level of government ambition regarding the organic sector development, which would also send an important message to private investors. Such targets should be clearly measurable and provide a good basis for evaluating whether or not the actions specified will be effective.

For targets, it is necessary to have a baseline figure, in order to measure the rate of progress.

# c. Identifying appropriate policy measures to address the objectives

Specific measures (actions) can then be proposed under each of the objectives/strategies. However, identifying measures for individual objectives may leave out possible synergies and systemic effects. An alternative is to develop result chains/networks, or a system map in which key levers are identified. The solution to achieve a mix of policy objectives may then be a combination of single-target policy measures and multi-target policy measures.

In reviewing and considering possible support measures, participants in the exercise should have the subsequent chapters of this document (details of various possible measures) at hand.

# d. Deciding on the measures and allocating budgets

The challenge, at this stage is that a very long 'shopping list' of possible actions may have been prepared. A "pruning" exercise will likely be necessary in order to match intended actions with available means. This step therefore consists of selecting and prioritizing relevant measures. Decisions required concern alignment with objectives, resource availability and prioritization, implementation requirements (processes and organization), desired outcomes and methods of evaluation. Effective decision-making requires planning, participation and transparency (openness).

After agreement has been found on the various measures to be implemented, **budget allocation** might need to be done, which may involve splitting a given overall amount into various objectives and measures, or estimating what each measure would require, to calculate the total budget needed. The availability of financial resources is always a critical point. Stakeholder groups should realize that not all desired measures can be implemented. Estimating the resource needs for each policy and weighing those needs as part of the policy prioritization and budget allocation is helpful and creates greater transparency between policy makers and stakeholders. Budget allocation should be based on an assessment of effectiveness and efficiency and priority should be given to high efficiency, i.e. highly effective measures that involve low costs.

In many cases, organic action plans do not directly involve financial means, but are an instrument for governments to make the strategic role of organic farming in the general organic farming policy transparent, and the budget to support the various activities in the plan will come from more general agricultural policies budget lines.

# e. Policy Implementation and Policy Evaluation

Implementation and evaluation details are not in the scope of these guidelines. However, two aspects can be mentioned:

- 1) Effective communication of the launch of the action plan is important for its future success and to motivate stakeholders to become active in implementation. It also sends a strong positive policy signal to the organic market and investors. The launch of the action plan can be the occasion of an official speech from a high-level policy person, which can be an effective way to raise the profile of organic agriculture.
- 2) Importance should be given to the institutional framework accompanying the implementation of the organic action plan. In particular, establishing a National Organic Council with representatives from stakeholders and relevant public ministries and institutions, has proven valuable in many countries. Such councils can have an advisory role to the (government) body in charge of implementing the organic action plan, and can also be used, later on, for advice on future policy formulation. Similarly, the existence of a coordinating organization such as Agence Bio in France (see more details in V, measure 4.c) is a great asset for action plan implementation.

For more detailed recommendations, examples and tools, with a particular focus on

Action Plan evaluation, consult the 2008 Manual <u>"Organic Action Plans Development, implementation and evaluation - A resource manual for the organic food and farming sector</u>" and in the online toolbox at <a href="http://orgapet.orgap.org/">http://orgapet.orgap.org/</a>. A <a href="http://orgapet.orgap.org/">French version</a> of the manual is also available. Both resources were developed for the EU but many of the recommendations are transferable to other regions.

# 3. Other policy documents relevant for organic sector development

There can be many other types of policy documents which are not national organic action plans but which can nevertheless provide a useful general framework for guiding and encouraging public support to organic agriculture, in ways that can be more or less detailed and strategic.

One scenario is where the country develops a strategic plan that is not specifically organic but that encompasses many pro-organic ideas. One example is **Sri Lanka's Toxin Free Nation Program** which is a 3-year plan adopted in 2016 by the Ministry of Agriculture and President's Office that lays down a ten point program to phase out toxic chemicals from Sri Lankan agriculture.

Many countries (including all EU countries) have a national action plan to reduce risks and the impacts of pesticide use. Supporting organic agriculture can and should be an important part of such plans.

There can also be national organic agriculture promotion laws, which may be the result of a national organic action plan exercise but not always. Sometimes, promotion laws are integrated into one document together with the organic regulation, so they become an "Organic Law" that has two components: regulation and promotion. For example, in **Mexico** the organic law of 2006 is essentially an organic regulation but contains one chapter (Chapter 6) on promotion and public support. Also, in the **Philippines**, the Republic Act 10068, also known as the Organic Agriculture Act (OAA) of 2010 contains both regulatory aspects and promotion aspects, and was accompanied by an institutional budget allocation of at least 2% of the annual budget of the Department of Agriculture (DA) to implement organic agricultural programs.

In other cases, promotion and regulations are addressed in two different laws. For example, in **Costa Rica**, the law 8591 of 2007 and the Decree 35242 of 2009 address promotion aspects, while the decree 29782 of 2000 is the organic regulation.

There can also be decrees at a more local level (regional or municipal), which can provide a conducive framework for public support to organic, again various degrees of strategies and detail. In **Mexico** for example, several states (e.g. Zacatecas, Chiapas, Oaxaca, and the federal district of Mexico City) have local laws establishing programs to promote organic agriculture.

Aside from laws and decrees, there can also be policy notification of a more inspiring (rather than constraining) nature, which can nevertheless lead to positive outcomes.

One example is the **USA**, which does not have a national organic action plan, but where in 2013 the national Secretary of Agriculture issued policy guidance on Organic Agriculture. The <u>Guidance on Organic Agriculture</u>, <u>Marketing and Industry</u> directs all USDA agencies to support organic agriculture and markets, stating "(Organic) production and commerce is a bright spot in the American marketplace of innovation and entrepreneurship, and particularly can contribute to USDA's goals for rural economic development. In recognition of this potential, the 2010 USDA Strategic Plan called for an increase of 25 percent in certified U.S. organic businesses by 2015". The guidance requests the agencies to identify ways to serve the needs of the organic sector and remove obstacles to it.

Public measures supporting organic agriculture may also be packaged in the form of time-limited programs or projects implemented or supported by the government. Such projects are often easier to get approved in the sense that they do no require the same level of broad domestic political support (especially if they are supported through development cooperation foreign aid). For example, in **Armenia** the government-assisted project "Organic Agriculture Support Initiative" started in 2015 at the request of the Armenian government. It is funded by the EU and co-funded and implemented by the Austrian Development Agency, and combines a range of support measures (watch the project launch video of the Armenian Organic Agriculture Support Initiative <a href="here">here</a>). This enables the Armenian government to implement concrete activities in order to deliver on the objective of having an efficient organic agricultural policy (an objective mentioned in the government's "Sustainable Agriculture Development Strategy").

Another example is **India**, where one government program packages several types of support measures to organic agriculture into one scheme supporting organic uptake: the Paramparagat Krishi Vikas Yojana launched in 2015 with a budget of around EUR 41 million. The scheme is a pro-active initiative of the Indian federal government and a component of the Soil Health Management scheme, which is part of the major project National Mission of Sustainable Agriculture.

Finally, organic agriculture may be mainstreamed into general agricultural policies, rather than being subject to specific policies and action plans. For example, in Switzerland, there is no government-endorsed national organic action plan, but organic agriculture development is mentioned and addressed in the general agricultural policy<sup>49</sup>.

# 4. Supply and demand, and other overall policy considerations

The long-term efficacy of policy measures does not only depend on the relevance of each measure taken in isolation. The right mix of measures, the reliability of and trust in government support, can have an even bigger impact on the sector development than

<sup>&</sup>lt;sup>49</sup> Bio Suisse, the national organic association, however calls for the Swiss government to work on a national organic action plan in order to provide a more proactive approach and clear political signal in favor of organic development.

the amount of resources invested.

# Achieving and raising the supply and demand equilibrium

Public policies are ineffective and inefficient when the concept is not economically viable. Thus, organic farming policies should be guided by a business minded approach focusing on developing the organic sector as a well-functioning competitive industry. In cases of strong demand-supply imbalance, public intervention will be most efficient when it addresses the side that is underdeveloped. However, in many cases, supply-demand imbalances are not so dramatic, and the aim is to take the sector to a higher level of supply-demand equilibrium, therefore boosting both supply and demand at the same time.

Raising the supply-demand equilibrium is a bit of a chicken and egg problem, there may be a justification for a temporary stage of imbalance before supply can pull its own demand or demand pull its own supply back into equilibrium. This can be planned over a multi-year period (typically an organic action plan length period) and temporary imbalances can be covered through specific measures such as area payments that give enough incentives for farmers to stay organic even if organic markets are not yet in place. Such a growth in supply can then provide the volumes needed for processors and retailers to enter the organic sector and then for consumer awareness campaigns to be implemented (as those require that products be available in stores). A temporary situation of supply-demand imbalance is therefore not necessarily bad and can, if combined with other measures to support organic processing and marketing, help move into a next-level supply-demand equilibrium for the organic sector.

In today's globalized economy, one must also consider the fact that supply-demand is no longer a purely national problem. A number of countries have a well developed, profitable and sustainable organic sector that is essentially export oriented (e.g. Tunisia or India), while a number of countries rely on a high level of organic imports and are bound to continue to do so, due to their climate conditions (e.g. Sweden, or Saudi Arabia). Export markets are part of the possible demand for domestic products, and foreign producers part of the possible supply. Many countries are exporters and importers at the same time and even those countries that are mainly exporters rarely manage to find an export market for all the crops in their traditional crop rotation, so a domestic market can be very valuable even if export is the main focus.

In view of environmental considerations and consumers' increasing desire to reconnect with their local producers, it can also make sense that policy action prioritizes improving the domestic supply-demand balance. One viewpoint is that, in countries that are large exporters of organic products, domestic consumers should also be able to consume the healthy products that distant markets are so eager to buy. Similarly, in countries that are big importers of organic food, consumers that invest in purchasing so much organic food should reap environmental benefits for their own surroundings.

# Reliability and market actors' trust

Policies may be less effective when market actors (farmers, processors, retailers) do not trust the reliability and continuity of governmental support. Investing in organic

businesses (farms as well as companies involved in processing and retailing) requires a reliable perspective to reduce risk. Action plans can be an instrument to document government's commitment and reliability towards organic farming. But more importantly it is the action itself that governments take, rather than the action plan documents, which express reliability and commitment. Governments should express what role organic farming plays in their agricultural policy concept and show that they are reliable partners for the farmers, processors and retailers.

Public-private collaboration acts in the same way as reliable policies. The entire organic sector development benefits from stable and reliable framework conditions and from good collaboration between the organic sector and government.

# Choosing policy measures that are suitable to the local/national context

Not all measures are suitable in all contexts. In the following chapter (Chapter V "Array of possible support measures"), we present 26 categories of support measures aimed at boosting supply and/or demand of organic products. Most of the time, national/local organic action plans or strategies, even when they are very integrated and comprehensive, will not use all of the measures presented. Priorities will be set and choices will have to be made. In order to help policy makers and stakeholders participating in strategic organic planning, the Global Policy Toolkit on Public Support to Organic Agriculture includes a Decision-helping framework that presents the suitability of each measure in relation to the various contextual scenarios in which a country/region can find itself. This decision-helping framework is based on four factors, and under each factor, three or four possible scenarios. These are the following<sup>50</sup>:

# Factor 1: The stage of development of organic agriculture

- Scenario a): Organic agriculture is at an embryonic stage of development, i.e. there is a small number of organic producers in the country, organic exports are not well developed, and the domestic market is very small or non-existent. (Country example: Georgia)
- Scenario b): The country is essentially an exporting country, i.e. exports of organic products are well developed, but the domestic market is very small or non-existent. (Country example: Uganda)
- Scenario c): The country is essentially an importing country, i.e. the domestic organic market is well developed, but not domestic organic production, which means that the organic market is essentially supplied with imports. (Country example: Saudi Arabia)
- Scenario d): The country has well-developed organic production and consumption patterns even though there may still be some supply-demand imbalances in either direction. (Country example: Germany).

# Factor 2: The organic regulatory context

Scenario a): The country has no organic regulation, and no officially referenced

<sup>&</sup>lt;sup>50</sup> The country examples are based on their situation in 2016.

- organic guarantee system. (Country example: Senegal)
- Scenario b): The country has no organic regulation, but has an officially referenced organic guarantee system that defines what is considered organic in terms of acceptable organic standard(s) and control system(s). (Country example: East-African Community countries)
- Scenario c): The country has an organic regulation but it applies only for exports, and there is no officially referenced guarantee system for the domestic market (Country example: India)
- Scenario d): The country has a fully regulated organic market (both for the domestic market and for trade). (Country example: USA).

# Factor 3: The culture of government intervention in the agricultural sector

- Scenario a): The country follows a free market approach, but with a significant level
  of government intervention in the agricultural markets, e.g. through tax and subsidy
  instruments to correct market deficiencies and support the agricultural sector.
  (Country example: the EU countries).
- Scenario b): The government has significant control over the agricultural market, but focuses on regulations, own programs, and development cooperation projects, rather than on permanent policy incentives. (Country example: Lao)
- Scenario c): The government prefers to let market forces drive the agricultural sector and market development. There is a very low level of market interventionism in the agricultural sector. (Country example: Australia).

# Factor 4: The logic of policy intervention: what are the main objectives behind the support to organic agriculture

- Scenario a): The purpose is to build the organic agriculture export sector as a strategy for earning foreign currency and contributing to poverty alleviation.
- Scenario b): The purpose is to encourage the production of positive externalities (environmental and societal benefits of organic agriculture) and to avoid negative externalities (hidden costs of conventional agriculture for the society).
- Scenario c): The purpose is to increase self-sufficiency in the organic sector in order to respond to high consumer demand and reduce the share of organic imports.
- Scenario d): The purpose is to increase access to healthy food products for all citizens (popularize organic consumption).

Each country will display a specific combination of scenarios from the four factors above. For the first three factors, the scenarios are exclusive: the country/region can fall in only one of the scenarios proposed under each factor. For Factor Four (the policy objectives), there can be several objectives (or all of them) that are recognized as legitimate policy objectives by policy makers (for example, legitimate objectives are listed in the introduction of the national organic action plan endorsed by the government). Sub-Saharan African countries would usually be under scenario a) for Factor 1 (embryonic stage of development of the organic sector), often under scenario a) or b) for Factor 2, and often under scenario b) or c) for Factor 3. The main policy

objective in supporting organic agriculture will likely correspond to scenario a) of Factor 4, although other secondary objectives might also exist.

The <u>Decision-helping framework</u> is a tool whereby the use can select the combination of scenarios that apply to a country's situation, and the tool will show the measures that are considered most suitable and suitable to that particular combination of scenarios. It will filter out the measures that are generally considered unsuitable to either of the scenarios or irrelevant to the policy objectives selected.

Chapter V explains, in narrative form, the suitable contexts in which each measure is mostly appropriate, in reference to the four factors and scenarios. This does not mean that measures are completely unfeasible in other scenarios, but there may be some major challenges to implementing them and it may be wise to consider other priorities first.



# CHAPTER V: ARRAY OF POSSIBLE SUPPORT MEASURES



# 1. Introduction

This chapter features the whole range of support measures that were identified through a global study of pro-organic public policies and programs. In the context of these guidelines, a "measure" is a particular approach on a leverage point along the supply chain: in other words, a certain way to attempt to influence decisions by one of the supply chain actors (be it the farmer, the processor, the trader, the consumer) in a particular direction. "Measures", represented by the paragraph headings in this chapter, are therefore broad categories of policy interventions and might encompass actions of various nature<sup>51</sup>.

The following diagram illustrates the relationships between the various points of leverage (decision making by various players) and the measures presented under this chapter. Click <a href="here">here</a> for a full size Power Point version of this diagram.

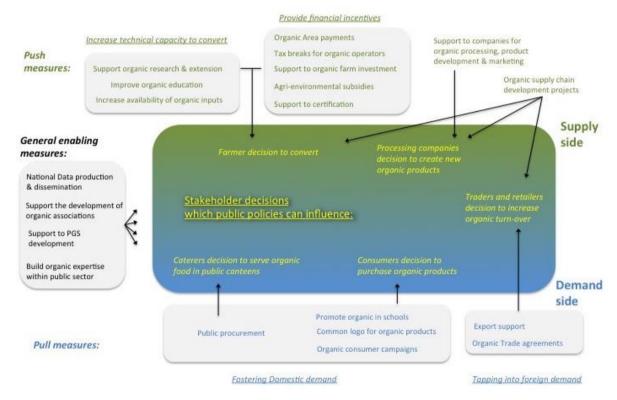


Fig 3: Overview of leverage points and possible policy measures to promote organic development

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information provision).

<sup>&</sup>lt;sup>51</sup> "Measures" as defined in the literature or policy documents (e.g. in the EU Common Agriculture Policy) do not necessarily correspond to the "measures" as defined in this Chapter. The "measures" presented in this chapter might also unfold into different types of policy instruments. For example, the same "measure" can be implemented in the form of any of the classical policy instrument categories, including legal policy instruments (regulations, in the sense of obligations defined by law), financial policy instruments (economic incentives or disincentives), and communicative policy instruments (including

Considering the importance, highlighted above, of balancing supply and demand, we have organized this chapter into push (supply) measures, and pull (demand) measures. There are however a few measures which fall in between and address both supply and demand by creating a supportive context for the development of the organic sector. We have clustered them under what we call "enabling" (combined push-pull) measures.

Some of the measures presented are very specifically targeted at organic agriculture. This is for example the case of organic area payments, organic management in public areas, consumer organic promotion campaigns, or the development of a national organic logo. Establishment of such support measures will be based on the values of organic agriculture per se, not on various forms of "sustainable" agriculture.

Other measures may be more easily integrated into broader policy schemes supporting sustainable agriculture and rural development, of which organic agriculture is one of the possible modalities. This is the case with support to farm investment, support to income diversification and agro-tourism, support to companies for processing, product development and marketing, support to agriculture supply chain development projects, support to agricultural input development, or support to certification. Access to support in a certain measure (say subsidies for farm equipment purchase) could be granted only to organic operators (maximum specific effect, best scenario for organic), or be open to organic and non-organic operators, with the following modalities:

- Higher support rates (e.g. higher payment rates) for organic operators
- With priority for organic operators or with preference to organic operators e.g. through a point system where organic operators receive higher scores in the evaluation (less specific effect)
- Or to non-organic and organic operators alike (but the measure might still have a positive effect if it rewards a type of decision that it made more by organic operators than conventional ones).

There are multiple examples of such approaches in the EU agricultural policy, and the detailed access criteria are decided on the state or even sometimes region level. It is therefore also important, in terms of policy development, to consider options for access criteria. The same also applies to some of the pull measures like support to export, or public procurement where support measures may be decided and adopted in a broader context (general trade policy, or promotion of sustainable schemes) but the detailed access criteria for implementation will make a difference in terms of how pro-organic the policy measure is.

# 2. "Push" measures

# a. Support to organic research and extension

# Political justification

The potential for innovation in organic farming systems is considerable. So is the potential impact of organic systems innovation on public goods and services, as well as on markets. However, current spending on agriculture research and innovation around the world does not adequately reflect this potential.

Scientific research, as a source for innovation, is key to:

- Increasing the sustainability, productivity and competitiveness of organic farming systems
- Conversion to organic farming, as the absence of organic solutions to specific local agronomic problems is one of the main obstacles when farmers want to convert.
- Recognition of the benefits of organic agriculture (both by consumers and by
  policy makers), which requires scientific evidence of the positive externalities
  associated with its production methods and of its superiority in aspects such as
  nutritional value and health.

Research and innovation in organic agriculture also benefits the conventional sector, increasing the overall sustainability of agriculture and food production. A classic example is new methods of biological control being used not only in organic systems, but also in integrated pest management. This is also true of the more institutional and social innovations aspects of organic agriculture: one good example is Participatory Guarantee Systems<sup>52</sup>, a social innovation from the organic sector which is being increasingly researched for its potential to expand to other sectors.

Therefore, investing public funds into organic research is primordial for the development of the organic sector, for the design of more sustainable production systems, for the design of new and resilient business models and cooperation among stakeholders across the value chain and for the delivery of public goods and services.

From an organic movement perspective, research is not only important to solve agronomic or technical problems but also to build evidence about the benefits of organic agriculture, and to design more effective institutional frameworks and policies.

The efficacy of advice on methods and technology is a crucial factor for the development of organic agriculture. Although farmers are often the initiators and testers of innovations, there must be a support structure that collects, transfers and spreads

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<sup>&</sup>lt;sup>52</sup> Participatory Guarantee Systems are local alternatives to third party certification whereby the certification is carried out by the stakeholders such as producers and consumers in a participatory manner. Those systems are particularly suitable to and affordable for small producers.

knowledge. In a country where organic agriculture is in its initial stage, farmers often guide advisors and researchers. Farmers are very important in the knowledge transfer process but they should be supported and encouraged by research and extension. The extension service also needs input from research on agronomic, marketing and health issues as well as pedagogical knowledge on how best to deliver the advice.

Research and extension services for organic farming should be strongly linked. This is the reason that the two topics are covered jointly in this section. Extension services should also be capacitated to provide organic advice and disseminate the results of applied research to farmers.

# Suitable contexts

Government support to organic research and extension is suitable to all contexts regardless of the stage of development of organic agriculture, the regulatory context, the policy goals and the culture of government intervention: agronomic research and extension exists in most countries. Growth of organic production will be severely hampered if those support sectors only work on conventional agriculture techniques. However, the relative importance of research and extension may vary depending on the stage of development of the sector: one quantitative study<sup>53</sup> analyzing market and policy factors influencing the share of organic land in a dataset of 61 countries for the years 1990 and 2001, found that the availability of organic advice by publicly funded extension personnel was one of the factors with the largest influence on organic farming adoption at the early stage of sector development, while national organic research activities become the most influential factor at later stages of development.

Support to organic research and extension is a type of policy support that does not require a lot of extra financial resources, but rather a shift of priorities to progressively include organic issues and knowledge into the work of agronomists, researchers and extension agents. Additionally, for developing countries, there is a real opportunity to include activities required for this shift in the scope of a development cooperation project thereby getting foreign resources to support it.

# Possible modalities of implementation

# Research

In some countries, organic research is integrated and dispersed within many different public research institutes and university departments. This is the case for example in Sweden, the US or Germany. Other countries have a specialized organic research organization or department that strongly dominates/coordinates organic research (even though other institutions can also conduct organic research). This is the case in Switzerland (with FiBL), in Hungary (with ÖMKi) or in Tunisia (with the CTAB). A somewhat intermediate model is the model of Denmark that has ICROFS, The International Centre for Research in Organic Food Systems. It is an established

<sup>&</sup>lt;sup>53</sup> WHEELER S., 2006, The Influence of Market and Agricultural Policy Signals on the Level of Organic Farming.

organization but operates as a "center without walls," where the research is performed in interdisciplinary collaboration between research groups in different institutions and universities.

The lead in organic research can be taken on by a public institution or by a non-governmental institution that receives important public financial support.

When organic research is conducted within an established conventional institution, there is a risk that the overall agenda of the institution, values and priorities of the dominant researchers hinders the development of a vibrant organic research environment. This is the case in Sweden, where organic research has taken place since the 1990s, but is still not much accepted in academia. It is likely that a special organic research institute would have been a better solution.

Regardless of the model chosen, it is highly desirable to have a mechanism for national (or even regional, like EU-level) coordination of organic research, favoring partnerships and long-term strategies. This can be in the form of a dedicated organic research program (funded for a multi-year period) such as the German BÖLN, or by assigning this role to a specialized organization (with on-going public financial support) such as ICROFS in Denmark.

There is a clear benefit<sup>54</sup> in having long-term programs that address the specific needs of the organic sector (identified through a proper stakeholder involvement process) and that enable coordination with organic research in other countries.

Permanence of the support to organic research is an important aspect of building long-term expertise for the sector.

One beneficial element is also to have or support a dedicated organic research farm that enables long-term trials. For example, in the Canadian province of Quebec, The Platform for Innovation in Organic Agriculture is a 200-hectare research site dedicated to organic research. It provides organically managed land and infrastructure required to allow for research, development, training and public awareness activities related to organic crop production.

The institutional mechanism to set the national/regional organic research agenda is another key implementation issue. Good examples are those where the organic research agenda is established through a participatory process involving the various stakeholders of the organic movement.

Finally, it is important that organic research considers, documents and validates traditional and indigenous knowledge, as it can be highly relevant for organic farming. It is also a way to integrate traditional farmers in research and research agenda setting.

#### **Extension**

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<sup>&</sup>lt;sup>54</sup> Evaluations (Andreasen, Rasmussen, and Halberg 2015; Rasmussen and Halberg 2014; Vieweger et al. 2014) found that the specialist organic farming programs have had a positive impact on the development of the organic sector and are relevant to meeting specific technical needs.

In terms of organic extension, there are also many different models.

The ideal model would be for extension services to be constructed so that, even conventional farmers learn first about organic solutions, and later, if they do not work, get advice on conventional solutions. Cuba and Bhutan have come closest to implementing such an approach.

In some cases the state advisory services offer tailor made provisions for organic farmers, e.g. Bavaria (Germany). Chambers of agriculture are often required to provide advisory services on organic agriculture (e.g. in Austria, France, Turkey), which often means they must have at least one organic adviser per regional/local office. In Denmark, the Danish Agricultural Advisory Service, run by the farmer's union, receives funding from the government to provide organic advice in its 30 agricultural centers across the country.

Training and advice can also be carried out by organic farming associations or private organizations, which are subsidized by public funds. Usually a grant is given to eligible expenses for the organization of seminars, field days, training courses and other information actions.

In the cases of FiBL in Switzerland, the Organic Research Center at Elm Farm in the UK between 1996 and 2011, CLOA in Egypt, or CTAB in Tunisia, the same organization hosts research and extension. When research organizations have organic demonstration farms, this is well suited for hosting organic extension activities.

Ideally, specific conversion advice provisions are designed for farmers aiming to convert their farms. Such services are provided at the national or regional government level in several European countries. Training and advice is offered in the form of phone or email help-lines, information packages, farm visits or demonstration farms. An innovative conversion program has been launched recently in Germany: conventional farmers interested in conversion may obtain a farm-check and are brought together with potential clients, i.e. processors and retailers before the conversion period starts.

The organic farmer field school model<sup>55</sup> can also be very effective way to provide training to organic farmers and is being implemented in several countries (e.g. Tunisia, Swaziland, The Philippines). Another interesting model is the Innovative Farmers Programme<sup>56</sup> run by the Soil Association in the UK.

A classical model is to offer short training courses for (aspiring) organic farmers, supported by public funds. Ministries of Agriculture have financed such courses in order to improve competitiveness of their organic farmers. In the EU some countries have even made short courses in organic agriculture a mandatory requirement for farmers to access other forms of public support to organic agriculture<sup>57</sup>. The rationale

<sup>&</sup>lt;sup>55</sup> See <a href="https://en.wikipedia.org/wiki/Farmer-Field-School">https://en.wikipedia.org/wiki/Farmer-Field-School</a> for more explanation of this model.

<sup>&</sup>lt;sup>56</sup> https://www.innovativefarmers.org/

<sup>&</sup>lt;sup>57</sup> In Malta, Andalucía and Cataluña (Spain), Ireland, Austria and Lithuania, attendance of training courses was mandatory for organic farmers participating in agri-environment or organic support payments. In

for such mandatory requirement is that training on organic agriculture greatly facilitates conversion and limits the risk of farmers reverting to conventional and/or having non-compliances to organic standards.

Training courses for organic farmers can be provided by a variety of institutions, ranging from universities, organic research organizations, NGOs, farmer associations or even consultancies, all of which can be supported by public funds (or by development cooperation money in the case of developing countries). Training courses are usually organized in the low farming season (e.g. winter) to maximize farmers' attendance.

# **Country** examples

**Cuba** is perhaps the best example of large-scale government support to organic agriculture research and extension. It adopted organic agriculture as part of its official agricultural policy in the nineties due to the trade embargo and agricultural crisis. The Ministry of Agriculture and the Cuban Association of Organic Agriculture took farreaching steps to promote organic agriculture systems and establish research programs that laid the foundations for food self-sufficiency through organic management. Cuba has since then led a number of sophisticated experiments and innovations in the organic field, such as bio-fertilizers, bio-pesticides and the use of fermentation. The Alejandro de Humboldt Fundamental Tropical Agriculture Research Institute of the Ministry of Agriculture is an active actor of organic research in Cuba. Moreover, the Ministry of Science, Technology and Environment (CITMA) has given priority to organic research themes by approving research projects linked to diversification, agroecology, organic agriculture and related topics. Nearly all agricultural research centers, and agricultural universities in Cuba have been involved in organic research. To date, organic research in Cuba is still a popular destination for exchange visits whereby other countries learn about organic innovations that they can replicate in their (tropical) situations, as well as get inspired by the research and extension linkages in Cuba. Practical results of Cuban research are incorporated into Cuba's Agricultural Knowledge and Information System which is then used for extension. Extension is organized under the Directorate of Science and Technology of the Ministry of Agriculture, which supervises various governmental, academic and NGO actors delivering extension services, and ensures that they use up-to-date, clear and consistent information.

**Tunisia** is an example of a country that proactively invested considerable public funds into organic research and extension at a very early stage of sector development, resulting in great success in terms of sector growth. For more information, see Best Practice Example textbox.

In **Morocco**, in 2011 the government signed a joint public-private contract with the organic industry (represented by AMABIO, the Moroccan association of organic agriculture) within which the government commits to allocate EUR 3.6 million of public money to support organic research, and EUR 1.8 million for extension (capacity building for farmers). The contract covers the period 2011-2020.

those regions (except Ireland), enough public funds were made available through other CAP measure (e.g. in Measure 111) to support 100% of the training costs.

In **Egypt**, the Government supports agricultural research through the Agricultural Research Center (ARC) and in universities. A department of the ARC, the Central Laboratory for Organic Agriculture (CLOA) was established to focus on organic research. CLOA researches and promotes organic production of various crops, especially vegetables and fruits. It also has extension services.

In the **Philippines**, the Bureau of Agricultural Research (BAR) is the main government agency that administers and awards research grants for organic agriculture. It funds basic and applied research, as well as the development and commercialization of viable and innovative organic agriculture technologies. It establishes Research, Development and Extension Centers (RDE) in strategic locations in the countryside usually located near Centers of Excellence. The first RDE Center established is the Cordilera Organic Agriculture Development Center (COARDC) at Benguet State University, launched in 2010. COARDC aspires to be the premier Center for Organic Agriculture in Asia. The National Organic Agricultural Program (NOAP), which was established by Republic Act No 10068 (2010), has since its inception supported more than 2,000 trainings for farmers and established and maintained more than 1,000 demonstration farms. The Agricultural Training Institute organizes training sessions specifically on organic agriculture, funded by the government. An organic conference is also organized every year, and the government sponsors the attendance of farmers and extensionists.

In **Argentina**, several agricultural research stations conduct research and extension activities on organic agriculture, with various specializations (organic horticulture, organic livestock production, etc.). The Ministry of Agroindustry has been sponsoring organic research as part of the Organic Agriculture Development Program (PRODAO) since 2011.

In **Brazil**, there are several research institutions working on organic agriculture or agroecology research, both at the federal and state level. The 2013-2015 National Plan for Agroecology and Organic Production (PLANAPO) allocated around EUR 18 Million for research and technology development and another EUR 215 million for extension services. A national program for technical assistance and rural extension is dedicated to family and traditional agriculture and puts a strong focus on ecological agriculture. The management of this program includes non-governmental actors.

In **Colombia** a number of public universities host research teams specialized in organic agriculture and agroecology.

In **Sri Lanka**, the national program for a toxin-free nation launched in 2016 foresees the establishment of full facilities required to conduct research into indigenous natural (organic) agriculture systems.

In **India**, the Indian Council of Agricultural Research, ICAR, started in 2004 a network project on organic farming at 13 centers in different agro-ecological regions of the country. Since then, the research centers have been working on the development of a package of practices for different crops and cropping systems under organic farming. In 2016, the government of India set up the National Organic Farming Research Institute

in Sikkim. Further, the government of Gujarat is setting up India's first university that focus exclusively on organic farming and research.

In **China**, CNCA, the Certification and Accreditation Administration, launched a program of organic demonstration counties. In 2015, seven counties were accepted and there are 30 more applicants. Additionally, the ministry of Environmental Protection has a "National Organic Production Base" of organic demonstration farms, which includes 150 farms, and is growing. By 2013 in Taiwan the Council of Agriculture had also established 8 "organic agriculture research teams" and "organic technique service groups" to conduct research and extension.

In **Bhutan** a capacity development program for farmers is implemented directly by the National Organic Program operated by the Ministry of Agriculture. Since 2008, the NOP program has trained 3306 farmers directly and 259 staff members of the Ministry of Agriculture (training of trainers). After the training of trainers, the MoA staff (including NOP staff and agricultural extension officers) carries out further training of farmers.

In **Cook Islands**, **Niue** & **Republic of the Marshall Islands**, the Pacific Organic & Ethical Trade Community, hosted by the Secretariat of the Pacific Community, manages a project funded by the EU and IFAD, which provides capacity building and technical support to around 600 farmers. In **Fiji**, the University of the South Pacific (supported by 12 island nations) specifically its Institute for Research, Extension and Training in Agriculture (IRETA) offers training and extension in organic agriculture.

In **Swaziland** the government supports a project (funded by the EU) aiming at training 1,200 smallholders on organic agriculture techniques and setting-up 6 organic farmer field schools with 12 trained organic extension workers.

In **Kenya**, the county of Busia partnered with local organic NGOs to train its extension officers on organic agriculture. A total of 18 extension workers attended the one-week training. The funds to organize the training came from a donor-funded project, but the county agriculture office allocated the time for their extension staff to participate in the training.

#### Best practice example

# Best Practice Example: Support to organic research and extension in Tunisia

Since enacting its organic law in 1999, the Tunisian government has taken a very proactive role in supporting organic sector development with outstanding results. Key support measures were the establishment of several institutions with budgetary autonomy and permanent allocation of public funds.

The Regional Center of Research in Horticulture and Organic Agriculture (CRRHAB) was established in 1999. It houses the Tunisian national Organic Agriculture Research Laboratory, which is responsible for conducting and disseminating research on all aspects of organic horticultural production systems for Tunisia's Eastern region, where most of the organic operations are located.

The Technical Centre of Organic Agriculture (CTAB) was also established in 1999 by Ministerial decree. It conducts applied organic research and provides training and extension services for organic operators and staff of other support organizations. CTAB adapts the results of CRRHAB's research for practical application by organic operators in their local conditions. CTAB also oversees trials for the endorsement and registration of different organic inputs and maintains a list of approved inputs on its website.

Other governmental bodies are also involved in organic research, such as the Institution of Research and Higher Agricultural Education (IRESA), which created the National Commission for Planning and Evaluation of Organic Agriculture Research. This body's activities include working with stakeholders involved in the organic sector with a view to addressing their operational problems through research. Several professional groups receive government funds to collaborate with research institutions on activities such as organic input development.

The National Program for Organic Agriculture has also established organic extension services in various districts of the country. Since 2003, thanks to a collaborative project between FAO and the various aforementioned Tunisian public institutions, the concept of farmer field schools has been extensively used in Tunisian organic extension.

The various government bodies active on organic research and extension (and more broadly on organic agriculture) work in tight collaboration, ensured through their respective institutional linkages, which includes membership on one another's boards and committees.

The establishment of organic research and extension institutions with budget autonomy and sufficient funding, as well as their interlinking, are factors that explain the success of the Tunisian government's policy on organic research and extension.

# Pitfalls and challenges

The main challenge in terms of public support to organic research and extension remains the amount and continuity of support. Overall a much larger share of the agricultural research public funds still goes to areas incompatible with organic agriculture, such as genetic engineering. However, some organic associations have been increasingly successful at putting organic farming on the policy research agenda. One example is the IFOAM-EU group. Following the publication in 2014 of a Strategic Research and Innovation Agenda for Organic Food and Farming by TP Organics, the technology platform for organic food & farming in the EU, the EU budget allocated to organic research was increased and organic agriculture is now explicitly mentioned in research policy documents as a valuable approach.

An important challenge when setting up publicly funded organic research programs is getting the right level of stakeholder involvement in the identification of research priorities. In terms of farmer involvement, experience in European Innovation Partnership projects on organic research has been very positive because farmers' needs are put at the center. End-user (farmers) involvement is crucial, but one should be aware that other stakeholders might also have legitimate (and not always overlapping) interests. For example, researchers and technicians have their own legitimate concerns and ideas when it comes to research priorities, and consumers and environmental NGOs

as well. Some might, for example, be more interested in an optimization of measures to conserve resources and the environment. Farmers on the other hand will be more concerned about solutions for pests and diseases, farm profitability and reduction of labor input. Advocacy organizations like organic associations will also have their specific needs, such as more studies proving the benefits of organic agriculture. Politicians might push for an increase in farm productivity or farm employment issues.

There is a risk that general public research programs do not factor in the time needed to bring stakeholders together in a more participatory research approach. For multi-actor projects to be successful, a preparatory phase is needed. To build a solid basis of trust among various participants takes more time compared to purely academic research where the researchers are more familiar with each other's worldview. This aspect of the work must be recognized and budgeted for accordingly. This can be done, for example, by providing seed money thus giving multi-actor consortia financial breathing space to prepare a full project proposal. Policy makers should provide long-term support to innovation projects. Following the close of a successful project, further financial support and follow-up promotion is often necessary to help disseminate the new ideas and change farming practices<sup>58</sup>.

Aside from the level and continuity of public support to organic research, and having the right level of stakeholder involvement, a bottleneck remains. In many countries, this is the ability of the research community to innovate while switching to a different agronomic paradigm.

Additionally, international cooperation in research remains a challenge, even though not specific to organic research.

Although agronomic research is the chunk of what is needed in organic research, it is also important not to forget organic processing issues (an area that is still largely under-funded) and the more social and economic aspects of organic agriculture (including markets and policies).

There are often calls for comparative research, where organic and conventional production systems are compared. This has some obvious value for informing advocacy and policy making, but it is of little value for organic farmers. It is also very difficult to design such comparative research until there is substantial knowledge of organic agriculture in the country, both among farmers and researchers, as comparisons only makes sense if they are based on realistic crop rotations and organic practices used by farmers. Moreover, as organic farming builds soil fertility over many years, such research requires a long time frame, often exceeding the time frames of typical research calls. A badly designed comparative research will consume a lot of resources and have no value for any stakeholder.

In terms of organizing the integration of organic agriculture into public extension services, the main challenge remains the state of mind of extensionists in the public

<sup>&</sup>lt;sup>58</sup> Moeskops B et al. (2014), *Action Plan for Innovation & Learning*, TP Organics, Brussels,

system. Some may have the status of public servants (employed by the Ministry of Agriculture) and have life-long positions. If they have been advising on conventional methods for the past 20-30 years, they may be unlikely to welcome a change towards more organic advice (and also are unlikely to be competent in providing this advice). Therefore, inclusion of organic advice in public extension services often means the recruitment of new additional staff, and therefore an increase in budget (and not a simple re-allocation of resources to different priorities), at least in the short-medium term until some of the advisors retire. Another challenge is that the farmer training provided by extension services in their classical form (more academic-like training) are sometimes not so well suited to the needs of organic farmers, where farmer-to-farmer knowledge exchange is more important.

# b. Support for organic input development and use

# Political justification

The support to organic inputs can come under the broader policy goal of reduction of chemical use in agriculture. A big part of the environmental damage caused by conventional agriculture originates from the use of chemical inputs (pesticides and over-application of chemical fertilizers). Hence supporting the development and use of alternative inputs such as organic inputs is one of the most direct policy interventions to address sustainability in agriculture. Supporting the development and use of organic inputs may not be restricted to organic producers, but can benefit the entire farming community. This is what is happening in Integrated Pest Management approaches, where at least some use of chemical inputs is being replaced by organic alternatives.

Support for research and development is particularly needed in this sector, because it is costly to develop and bring new organic pest control products onto the market. Also, at the beginning such products are unknown and expensive due to their small market share. Agro-chemical companies have benefited from decades of public research and support, and have therefore a massive head start compared to small companies that are starting to develop alternatives. Public support is thus required, also to cover the expensive input registration process, and help spread those inputs to farmers (as well as gardeners and public green space managers). Registration costs and requirements are further discussed under in Chapter VI, section 5.

The efficient recycling of waste products from food industries, public kitchens and households can on the one hand reduce pollution from waste and on the other hand supply (organic) farms with valuable nutrients.

Similarly, the development of crop varieties suitable to organic farming (or similar approaches) has been largely ignored by public research in the past decades and is therefore lagging behind conventional plant breeding. The development and propagation of organically-suitable (or even "organically bred") varieties takes a lot of time and is essentially a common good activity (especially as organic varieties should not be patented) that deserves public support.

#### Suitable contexts

Support for organic input development, production or import is a relevant action for any policy objective that aims to develop organic production. It is therefore a suitable measure at any stage of development, in any regulatory context, and in any logic of the policy support to organic. The only context in which it may not be suitable or feasible is in the case of a government culture of no intervention on the agricultural market. As agricultural input provision is also a business segment, anti-intervention governments will likely not want to get involved into such action that would twist the market competition in favor of certain types of inputs.

# Possible modalities of implementation

Support for organic input development and use can take several forms.

Some countries have given grants to support companies in doing R&D on organic inputs (e.g. in France), or dedicated special research funds to develop organic inputs identified as most needed (e.g. France, Germany).

Some governments take on the role of organic input developers and providers directly, whereby they produce the inputs and distribute them to farmers free of charge or at very subsidized costs (e.g. the Philippines, the State of Sikkim, Bhutan).

Some countries have exempted organic inputs from certain tax and import duties (e.g. Tunisia).

Some governments subsidize the purchase or the self-production of organic inputs by farmers (e.g. Mexico, India, South Korea). This can be either in the form of ongoing subsidies for purchase or of investment grants. For more information on the subsidies for organic fertilizers and organic pesticides, see Chapter VI, section 1.

The lowering of regulatory barriers on-farm inputs such as fertilizers, crop protection products, and seeds, are discussed under Chapter VI, section 5.

# Country examples

In **Mexico**, the federal government subsidizes 50% of the total cost of permitted organic inputs (with an upper limit of EUR 9,700 in 2015 year). The states of Chiapas, Oaxaca, Michoacán, Jalisco and the federal district of Mexico City have also subsidized the production of organic inputs, particularly compost.

In **Brazil**, the government supported the production and distribution of seeds of traditional crop varieties. By 2014, 600 seed banks were created due to the government allocation of EUR 5.8 million to support the conservation, multiplication, distribution and commercialization of seeds and seedlings. Additionally, another EUR 2.7 million were spent between 2013 and 2014 under the food public procurement program to purchases seeds of local and traditional varieties through public procurement, which were later distributed to family farmers and their associations.

In the **Philippines**, the Organic Agriculture Act of 2010 foresees that the government, at regional and local levels, establishes production facilities for bio-inputs and provides no-cost or subsidized inputs to producers. Between 2011 and 2016 the government established, maintained and upgraded 746 organic input product facilities. It also distributed more than 199,000 kg of organic seeds, 233,000 planting materials, 1,100 MT of organic fertilizers and other inputs, 4.4 million pcs of Bio Control Agents. Worms have been given to thousands of households to start home-based vermicomposting facilities. The government also distributed thousands of organic animals, including organic fish fingerlings and brood stock.

In **India**, the Government is promoting organic fertilizers by providing financial assistance through several schemes. Under the National Project on Organic Farming (NPOF) financial assistance is provided through a Capital Investment Subsidy Scheme (CISS) for setting-up agro-waste compost and bio-fertilizers/bio-pesticides production units. Subsidies amount to 25% of the total cost of project up to EUR 55,000 per unit for fruit/vegetable waste compost units and EUR 2,000 per unit for vermiculture hatcheries. The NPOF conducts other activities on organic inputs such as organic input resource management, technology development through support to research and market development, maintenance of a National and Regional culture collection bank of biofertilizer, biocontrol, waste decomposer organisms for supply to production units, development & procurement and efficacy evaluation of biofertilizer strains and mother cultures. Under the National Horticulture Mission (NHM), financial assistance is provided for setting up vermicompost units at 50% of the cost subject to a maximum of EUR 415 per beneficiary. Under the National Project on Management of Soil Health and Fertility there is provision for promotion of organic fertilizer up to around 7 Euros per hectare. The fund for agricultural development named Rashtriya Krishi Vikas Yojana (RKVY) also provides support for the development and quality control of organic farming inputs, especially biofertilizers, through a variety of measures including subsidy, R&D grants, and market development assistance. In the Indian State of Sikkim, the State government established vermicompost facilities and provides free or subsidized inputs under the Sikkim Mission. These include biofertilizers, including effective micro-organisms, mineral fertilizers and organic seeds and planting stock. The Sikkim government also provides pest monitoring and release of bio-control agents (see more information on the Sikkim input support in the Best Practice textbox below). Similarly, the State of Kerala has subsidized vermicompost tanks, organic manure, biofertilizers, biopesticides, and organic seeds and planting materials.

In **Indonesia**, the province of Bali has since 2009, implemented a gradual strategy to replace chemical fertilizers with organic fertilizers (see Chapter VI, section 1). Besides phasing out subsidies on chemical fertilizers (phased out in 2012) and continuously increasing subsidies on organic fertilizers, the integrated farming (Simantri) program (also known as "Organic Bali"), offered cash and technical assistance to farmers' groups willing to adopt organic farming methods and to use alternative energy sources. In 2012, the governor of this province received an award for this program from the Indonesian Minister of Agriculture. Other provinces in Indonesia have also started providing substantial support to organic fertilizers in the past few years. For example,

in 2013, the district of Toba Samosir, in the North Sumatra province, invested EUR 108,000 in direct support for organic fertilizer purchases and another EUR 20,000 for a livestock fertilizer program. In 2011, the same district also invested EUR 61,000 for building composting facilities. In the same year, the district of Semarang, in the Central Java province, has invested EUR 24,000 in organic fertilizer processing units.

In **Thailand**, the government launched, in 2005, the National Agenda's Organic Agriculture, a 5-year program aiming to support 4.25 million farmers to use organic inputs instead of agro-chemicals covering an area of 13.6 million ha, reducing total import of agro-chemicals by 50% as well as boosting organic export by 100% annually. A total of 23 public agencies were involved and the government allocated around EUR 31 million in 2006 for this program.

The **Sri Lanka** "Toxin Free Nation Program" published in 2016 foresees the distribution of organic fertilizers to farmers. In the plan, the Sri Lankan president commits to increase state interventions and investments to expand the use of traditional seeds and to prevent the subjugation of the monopoly in seeds to corporations. Sri Lanka started subsidizing organic fertilizers in 2016.

In **Bhutan**, the Ministry of Agriculture endorsed a plan in 2015 for the production and supply of bio-inputs, including facilitating distribution through the government system to ensure organic producers in the whole country will have access to the bio-inputs they need. This is however still at early stage of implementation.

In **Nepal**, the Ministry of Agriculture started in 2015 an organic fertilizer subsidy program. Farmer groups and cooperatives that have constructed cow shed and vermicompost facilities can receive subsidy of up to EUR 200 per farmer from the District Agriculture Development Offices. Farmers who purchase organic fertilizers (whether dust, pellets or vermicompost) can receive a subsidy of around 82 €/ton of fertilizer to a maximum of 1,5 ton.

Since 2011, the council of Agriculture of Taiwan, in **China**, provides subsidies to farmers for the purchase of organic fertilizers and for setting-up composting facilities.

**Tunisia** exempted organic farming equipment and supplies from value-added tax and custom duties, as well as useful insects for biocontrol for organic agriculture (this was established through presidential decree in 2007). The Tunisian government also funds the Vegetables Inter-professional Group that collaborates with the national center for organic agriculture CTAB to develop improved vegetable seeds and coordinate breeding programs aimed at enhancing organic vegetable production. It also partners with CTAB to support compost production activities and testing of organic inputs.

In **Kenya**, the local government of the Busia County is supporting the establishment of an organic fertilizer factory. Private investors will build the factory but the county donated the land and allocated some funds to support the project.

#### Best practice example

# Best Practice Example: Sikkim's support for organic input development: a holistic approach

Assisting farmers to access organic inputs was a key objective of Sikkim's Organic Mission, which was launched in 2010 with the aim of converting all agriculture land of the Indian State to organic by 2015 (see box in Chapter III). The mission continues in a new phase until 2018. To implement its Mission, including measures on access to inputs, Sikkim drew financial support from several national sustainable agriculture programs including the National Mission for Sustainable Agriculture (NMSA) and the Mission for Integrated Development of Horticulture. The NMSA has provided special assistance to Sikkim and eight other States through a subprogram, Organic Value Chain Development Missions for the North-Eastern Region. This scheme aims to develop the full value chain starting with farm inputs and seeds. It offers funding to states on a per hectare basis for implementing assistance for on-farm and off-farm input production, quality seed and planting material supplies, training on input selection and use, and assistance for input production and distribution.

Sikkim's Organic Mission includes the following measures with respect to organic inputs:

- Providing structures for pit composting and vermi-composting to organic farmers;
- Providing worm cocoons and worms to farmers;
- Producing and distributing locally adapted strains of biofertilizers e.g. azolla (an aquatic fern), oil cake, effective microorganisms for compost;
- Training famers on organic fertility management and pest control e.g. vermi-composting, using bio-controls. (Specific training targets are set in the Mission plan);
- Providing seeds for green manure to farms;
- Providing mineral amendments at subsidized rates, or free in the case of dolomite for acid soils;
- Producing and releasing bio-control agents;
- Strengthening the state's IPM lab including the deployment of mobile plant protection vans to pest hotspots.

#### **Organic Seeds**

The Mission also developed plans and allocated resources to facilitate farmers' access to organic seeds and planting materials. This is an overlooked aspect of the action plans of most other developing countries. "Seed is the most important input of any agricultural production and it should be free from chemicals," states the 2014 progress report on the Sikkim Organic Mission. Activities towards supplying farmers with quality organic seeds include:

- Strengthening the seeds laboratory testing and processing facilities;
- Various local organic seed development projects including contracting seed producers, and government purchase and distribution (quantitative targets for various crops are set in the plan);
- Establishing automated greenhouses for quality organic seedling production.

# Pitfalls and challenges

The challenge of policies aimed at supporting organic input availability and use is that they might be embedded in a broader policy framework that encourages the opposite, for example subsidies on the use of chemical fertilizers. See Chapter VI, section 1 on how such general agricultural policies can negatively impact on organic agriculture, and how they can be adjusted to mitigate this impact.

There is also the risk of putting too much implementation in the hands of the government, and not enough into the hands of the private organic sector. This can be particularly problematic when public servants are asked to deliver training or to plan organic input production and delivery, without having the right knowledge and understanding of organic agriculture. For example, the experience of Thailand shows that training on organic inputs delivered by government agencies that have no knowledge or belief in organic farming leads to inappropriate content and methodologies, emphasis on the wrong approaches, and ultimately failure to achieve the policy objective. To reduce chemical fertilizer use, Thailand's government agencies provided organic inputs and training to farmers on how to replace chemical inputs by organic inputs. About 1,75 million farmers (representing about 34 % of the farming families in Thailand) were trained. However, the statistics show that the national import of fertilizers continued to increase after this action. The private organic sector, that includes many qualified organic professionals in Thailand, was not involved in this action.

Support to organic inputs may underscore the misconception by farmers, extension service and policy makers that organic agriculture is mainly about replacing chemicals with organic inputs, while organic management should rather strive for a system where inputs are less needed. In addition, not all organic inputs are useful or worth their price. There are many examples of rather ineffective organic fertilizers or growth promoters that are sold for a high price. There has to be some validation of inputs before they are subsidized.

# c. Support to certification

# **Political justification**

The role of certification is to provide a guarantee in the marketplace, enabling consumers to identify which producers conform to certain standards. In this sense, certification corrects one of the imperfections of the market, namely the asymmetry of information available to each side in a transaction (the seller and the buyer). Therefore, in a free market economy, certification acts as a public good to help optimize the functioning of the market. As organic certification is voluntary, the cost is mostly incurred by organic producers, while conventional producers have no such cost. Governments can correct this imbalance and help promote a well-functioning market by supporting organic certification, taking on some of the costs that otherwise fall on organic farmers.

Apart from the cost of certification services, there are considerable costs involved in the set up of the certification institutions, training inspectors/auditors, cost for accreditation etc. If the government performs this service it can be expected that they cover the development costs for the system and not let users pay for that as well. But also with private certification bodies, it can be justified for the government to cover some of these costs in support of an emerging sector.

Another reason for government to cover certification costs, in part or full, is to help ensure equal access of all operators to the service, across the territory and across all farming systems. Most often, private certification bodies charge operators for travel costs to their location, as well as time spent on their audit, etc. This can result in unequal access to certification. For example, operators based in remote areas of a country and those with diversified production systems may have to pay more for certification, which can be considered unfair competition and detrimental to rural development objectives. An organic certification support system can help correct such disparities.

Studies have shown that organic certifiers, and public support to organic certifiers, play a major role in enabling organic development at a local level. For example, a study published by the US Organic Trade Association in 2016<sup>59</sup> looking at factors of development of organic agriculture in various localities, concluded "*The prevalence of outreach services by organic certifiers is found to play one of the strongest roles in organic hotspot formation. Also, whether a certifier is government-sponsored, by a state department of agriculture for example, is another key factor in enabling organic hotspots*".

# Suitable contexts

Support to organic certification is a measure suitable to all contexts and all policy objectives.

# Possible modalities of implementation

One model is to set-up a national certification body that is financed through the regular public budget and that offers free-of-charge certification to all organic operators nationally. This can be the most practical for operators, as they do not have to comply with complicated administrative procedures to apply for reimbursement of their certification costs. The free-of-charge public certification service is the model chosen by Denmark, which has a government-run certification system using civil servants. This has many advantages. According to Organic Denmark, this has freed up the private organic sector to invest its energy and resources in new directions to grow the sector. Also the engagement of civil sector personnel on farm with operators and managing the certification system has resulted in knowledge building in both the government and private sector that has enhanced dialogue and mutual support between government and the private organic sector. However, the model also has important limitations. and there are many situations where private organic certifiers are proven to be more effective than government agencies (those might be ineffective and/or corrupt in certain countries, or will not have the competence required to access needed international accreditations).

Some countries have set-up a national organic certification body providing certification not free-of-charge but at reduced costs. Sometimes, this certification is valid only for the domestic market, e.g. in the case of Lao, because the national certifier lacks

<sup>&</sup>lt;sup>59</sup> The report is available at <a href="https://www.ota.com/news/press-releases/19049#sthash.whEoHJ5O.dpuf">https://www.ota.com/news/press-releases/19049#sthash.whEoHJ5O.dpuf</a>

international recognition. The government may invest in getting their national certification body IFOAM-Accredited, which will be helpful to ensure it works up to international standards (this was, for example done by Czech Republic before they entered the EU).

Subsidies for organic certification are a common mode of support. They can be integrated into national policy on organic agriculture, be allocated a specific budget annually and be managed by the national organic program or related programs.

There are several ways to construct the certification subsidy scheme. It may be ongoing (e.g. US cost-share program) or temporary (e.g. Tunisian case with limit of 5-7 years per operator), or a combination of both.

Operators must usually apply, post-certification, to a dedicated national or regional administration office in order to get their certification cost reimbursement. An interesting set-up is the case of the Philippines where the producer applies to the Ministry of Agriculture regional field office prior to inspection of the certifying body and the office makes the payment to the certifier directly. The government designed the subsidy to include travelling expenses of the inspectors, inspection and re-inspection fees, application, certification fees and laboratory analysis.

The subsidy is most often calculated on the basis of reimbursing a percentage (or full amount) of the annual certification costs incurred by farmers, but with upper limits to avoid large-scale operators benefitting too much from the scheme. In countries with group certification, a higher upper limit is fixed for groups, as compared to individual operators.

Then, there are more ad-hoc forms of support to certification, such as funding the certification of a big group of producers within a time-limited government-funded project, or projects supporting the setting-up of Internal Control Systems for group certification.

#### **Country** examples

Government support to organic certification costs is a widespread form of government support to organic agriculture, used in all five continents.

In several countries, the private certification bodies received substantial government support in their establishment phase. This was the case for example in **Norway** and **Sweden**. In developing countries<sup>60</sup>, the establishment of local organic certification bodies tended to be supported by donor-funded projects, especially in the period 1995-2010. Those were often government funds, but from foreign governments.

In the **USA**, support to certification cost is the main form of financial support to organic

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 $<sup>^{60}</sup>$  For example in Uganda, Tanzania, Turkey, Lithuania, Ukraine, Bulgaria, Croatia, Thailand, Peru.

farmers. Several programs provide reimbursements of up to 75 % of annual certification costs, up to a maximum payment of EUR 697 per year per farm.

**EU** Member States have adopted different approaches to refund certification and inspection costs of organic farmers. Several countries/regions cover parts of, or up to 100% of certification and inspection cost incurred by farmers. In **Denmark**, certification is provided free of cost to operators through a government-run certification system. See best practice textbox below.

In **Indonesia**, the Food Crop Agricultural Agency of Bali Province kicked-started local organic certification by covering the costs of the certification of 22 farmer groups in the period 2009-2012.

In the **Philippines**, certification cost support is mandated in the Organic Agriculture Act of 2010. In 2016, the certification cost support program funds micro, small and medium enterprises engaged in local food and input productions for all certification costs for up to three annual certification cycles, which represent a subsidy ranging from EUR 950 to EUR 2850 depending on the number of scopes and whether the operation is an individual or a group.

In **India**, the government is providing, through various schemes at the federal or state level, subsidies to farmer groups to meet certification costs and manage Internal Control Systems. For example states under the Horticultural Mission for Northeast and Himalayan States support certification costs for smallholder farmers for up to 50% of the costs and up to EUR 135 per beneficiary and EUR 7,000 for a group of farmers covering an area of 50 hectares. For the first time in 2015 the Federal Government has extended financial support ranging from EUR 27,000 to EUR 234,000 to State Governments of eight North Eastern states for setting up public certification bodies and obtain accreditation. The assistance is mainly composed of accreditation fee, capacity building, exposure visits, infrastructure creation and other establishment related costs.

In **Samoa**, the government supports the organic movement by paying 100% of costs for the annual organic audit funded through the Ministry for Commerce, Industry and Labour. The audit costs are high as there is no local certification body. This was initiated by the Organic Advisory Committee, which is chaired by Samoa's Prime Minister. The number of participating farmers is nearing 600.

In **Lao**, in 2009, the Ministry established a local organic certification body that provides low-cost certification to small farmers, as well as assistance in setting up Internal Control Systems for group certification.

In **China**, there are some 80 local government policies providing certification subsidies to organic farming enterprises, accounting for more than 50% of all local policies related to support for organic farming. Individual subsidies range from EUR 1,394 to EUR 7,437, indicating that subsidies are going to large farming enterprises and/or organic production groups. Also, in Taiwan, the Council of Agriculture provided training and support for the establishment of producer groups with internal control systems and

organic farmers can receive a subsidy covering part of the costs of certification and lab tests for residue testing.

In **Tunisia**, the government started to subsidize organic certification costs through its decree of 1999<sup>61</sup>. In the framework of its 2010-2014 Organic Plan, the government created a subsidy package that covers 70% of the cost of certification and inspection for both individual and group organic producers converting to organic, for a period of 5 to 7 years. Subsidies are capped at about EUR 2,225 per year for individual producers and up to EUR 4,449 per year for group producers and associations.

In **Mexico**, as of 2015, the federal government had a number of subsidy schemes to support organic certification, published in the decree of December 28, 2014. First, it covered 50% of capacity building costs related to obtaining organic certification (or up to 75% in marginal areas with an upper limit of around EUR 7,300 per application). Second, it covered 50 – 75% of the costs of technical assistance for operators to produce their Organic System Plan (which is required in Mexican organic regulations) with an upper limit of around EUR 4,900. Third, it covered 50 – 75% of the total cost of certification, with an upper limit of EUR 3,400 per operator. Finally, it supported certification bodies directly by covering 50% of their total organic accreditation costs with an upper limit of around EUR 6,000 per certification body.

In **Costa Rica**, the government established a system of free public organic inspection, hosted by the Ministry of Agriculture. However, the service is not accessible to all producers due to the low number of inspectors, unable to satisfy the demand.

# Best practice example

# Best Practice Example: Organic Certification Subsidies in the Philippines

Only a small fraction of the Philippines 88,000 organic farmers and other organic enterprises are third-party certified. The vast majority relies on participatory guarantee systems for verification, or participates in direct markets that do not require verification. However, the Philippines Organic Law, 2010 (Republic Act No. 10068) envisions subsidies for certification as one of the means to provide incentives for farmers and other organic enterprises to convert to organic agriculture and to access markets requiring third party certification such as supermarkets and exports.

The subsidy program was implemented after issuance of a Department of Agriculture (DA) Administrative Order in January 2012, (Regulation of the Incentive Subsidy Scheme for Organic Certification," which is now superseded by Department Circular No 4 2015. This order authorized funding and set out administrative policies and procedures for the program. The 2012 order also added two additional objectives to the original objective of the Republic Act No. 10068, giving incentives to enterprises. These are to prevent fraud and to assure consumers of the quality of organic products.

Scope for the subsidies

<sup>61</sup> Legal reference: http://www.ctab.nat.tn/R DC2361 fr.pdf

Subsidies are offered to entities that:

- Are farms, input producers, processors, handlers
- Attain organic certification from a certification body accredited under the Department of Agriculture
- Are micro/small/medium enterprises or indigenous people or agrarian reform beneficiaries
- If exporting, use DA-accredited certification bodies that have international recognition.

The schedule of the subsidy is intended to cover the full cost of certification for three one-year periods based on annual application, available to newly certified enterprises and those continuing their annual certification. A schedule of subsidy payments includes payment rates for single operations, single operations with subcontracted farms, and groups according to the number and nature of production scopes. There is also a special category for entities engaged in wild collection. A single operation with one scope of operation receives a subsidy in the range EUR 790 to about EUR 880.

#### *Procedure for the subsidy*

The subsidy is implemented through an arrangement between the Department of Agriculture Regional Field Offices and the DA-accredited certification bodies. The operator applies to the Regional Field Office for the subsidy, indicating choice of organic certification body. The Regional Field Office initiates a procurement process with this certification body for the operator's certification. It also assesses the applicant's readiness for third party organic certification based on document review, and in some cases a visit to the operation. It notifies the certification body when the operation is approved for the certification process. After the certification process, certified operators may then submit to the Regional Field Office proof of certification and receipts and/or invoices for the cost of certification. Following this submission, a tripartite Memorandum of Agreement is signed among the operator, the operator's certification body, and the Regional Field Office, which specifies the terms of the subsidy. The Regional Field Office then issues payment to the certification body for its invoice and/or to reimburse the operator for fees already paid.

#### Results

By January 2017 of the 117entities that had requested participation in the subsidy program, 29 certified organic entities had received subsidy payments totaling almost EUR 37,500, and the rate of new applicants remained steady. Reasons for entities' withdrawal from the program include non-compliance with requirements, laboratory cost exceeding subsidies, decision to use participatory guarantee systems instead of third-party certification, and decision to fully assume the certification costs.

# Pitfalls and challenges

Similar to other types of subsidies, subsidies for certification can present challenges in terms of access, especially for smallholders. When the procedure is too complicated, and not all operators are aware of the existence of this support, the actual uptake could be just a fraction of the total number of producers who are entitled to the support. Channeling support through the certifiers directly (rather than reimbursing the producers) can be a way to make it easier for producers, but there are cases where the support to certifiers is not effectively/entirely passed down to clients, which is a suboptimal use of public money.

The fully subsidized government certification option presents the advantage of guaranteeing full benefit for all operators, if the service is well staffed – which is not always the case, as the Costa Rican example shows. However, the challenge is for the government agency in charge of organic certification to develop the right competence and be able to serve the desired markets (which means, often, having all the needed international accreditations). It will also not work well in countries where there is a lack of trust and cooperation between government and the private sector and/or a culture of corruption.

Government certification is normally only granted according to national standards, which becomes a pre-requisite. However, in the market place there might be a need for the certification body to certify, or at least inspect, according to private or governmental standards in other markets or for categories of production not covered in the national standard. It is often hard for a government agency, which works according to set administrative regulations, to provide such services.

Especially because government certification for the domestic market usually has no oversight, the credibility and competence of the government agency providing certification is a crucial factor. Even if not strictly demanded by the market, obtaining IFOAM Accreditation is one of the most effective ways for a government certification program to verify and demonstrate competence.

In case the government wants to provide technical support for certification, e.g. for the setting-up of Internal Control Systems, in a system which is intended for international recognition, this should be provided by a different agency/unit from the one doing public organic certification. This is in line with the international principles of separation of advice and certification functions. If the public certification system is only intended for the domestic market, there can be more flexibility: governments may develop, in close discussions with private organic stakeholders, whatever system they feel would provide the credibility needed in their own national context.

# d. Support for organic vocational training and academic programs

# Political justification

Organic agriculture is knowledge intensive. In the past few decades, in many parts of the world, agricultural education at various levels (in schools, universities, extension) has focused on conventional methods with high use of agro-chemical inputs, high yielding varieties, new plant breeding techniques, optimization of animal weight gain without consideration for animal welfare, etc. A lot of the knowledge dispensed through these agricultural education channels is not relevant to organic farming, or opposes it. To accompany the growth of the organic sector in a country it is crucial to develop organic agriculture education parallel to conventional agronomy and animal husbandry. In many cases, organic knowledge will also benefit people who might work in the conventional sector, in particular when it comes to improving the sustainability and

resilience of conventional agriculture as they may pick up some useful ideas and concepts from organic agriculture. Therefore, it is an efficient use of public funds to include organic agriculture or agro-ecological approaches as a voluntary or compulsory component of agricultural vocational training and academic programs.

#### Suitable contexts

Similarly to organic research and extension, the development of organic vocational training and academic programs is suitable to all contexts and policy objectives, with the exception of very early stages of organic development where there isn't even yet enough knowledge in the country to set-up such professional education programs. At such early stages, people who want to specialize in organic agriculture would typically go abroad for studies. After some domestic universities have accumulated experience working on organic agriculture research and projects, and there are experienced organic professionals in the country, specific organic courses can be set-up and demonstration sites can be established.

# Possible modalities of implementation

The ideal scenario is to combine mainstreaming of organic agriculture through compulsory courses in all agricultural education programs with offering specialized organic agriculture diplomas and degrees. That way, all agriculture students will achieve a basic level of understanding of organic agriculture, while some students can specialize further in organic agriculture.

The creation of special organic agriculture departments within existing agricultural universities is a best practice to ensure a stable pool of organic experts, who can work both on organic education and on organic research. This is common practice in EU countries and in a few other countries (e.g. Tunisia). Certain governments have gone a step further and established fully organic agriculture universities (e.g. recently Gujarat state in India).

A dedicated university or university department offering a specialized MSc in Organic Agriculture (or agro-ecology or similar terms) such as at the university of Kassel, Witzenhausen/Germany, the university of Berkley, USA or the Azad University, Karaj, Iran, is a real asset for the country, but it is also very important to offer organic specializations in lower-level education programs, such as diplomas and even school programs in areas where many school students will end up working in agriculture. Austria, for example, offers excellent organic vocational education with many 3-year vocational school programs specializing in organic available around the country.

When a whole degree/diploma in organic agriculture is not possible, a good starting point is to offer at least some optional specialization in organic agriculture in regular agriculture degrees (e.g. Belgium started offering organic farming options in agriculture diplomas in the late 80s).

On-the-job training for people who are already agricultural professionals is another format, especially relevant for staff of extension services. Such training can be organized and/or financed by the government.

Public institutions can also support time-limited projects that include cooperation between organic training institutions to produce common educational systems and materials. There have been several such cooperation projects funded by the  $EU^{62}$ .

Similar projects can also be funded as development-cooperation projects. A case is the project "Development of Institutional Capacity in Organic Agriculture" funded by the England Africa Partnership (EAP) program of the UK Department for Education and Skills. The project partners were OAPTIN (the Organic Agriculture Project in Tertiary Institutions in Nigeria) and Coventry University in the UK. OAPTIN is a network launched in 2005 by a consortium of Nigerian universities aiming to improve the contribution of education institutions to organic agriculture in Nigeria. The project developed an organic curriculum and teaching materials suitable for Nigerian Tertiary Institutions, and provided capacity building for university staff. This project was then replicated more widely in West Africa under an EU co-operation project, "Institutional Capacity Building for Organic Agriculture in West Africa". Under this project, a three-week "Concepts of Organic Agriculture" workshop acquainted university lecturers with the basic principles of organic agriculture.

Another development cooperation project in Nigeria, the "Work, Earn and Learn Programme for Developing Entrepreneurship in Organic Agriculture among Graduates in Nigeria", provided hands-on experience through work and provided teaching on new skills and attitudes for gaining access to markets. It included 4 weeks of intensive courses, followed by 3 weeks of internship in the private sector, visits to successful organic businesses overseas, mentoring to develop a business plan and support for business start-ups, marketing etc. Following the course, 69% of trainees opted to start their own small-scale businesses in organic agriculture.

# Country examples

**European** countries are increasingly supporting the integration of organic education in public institutions. There are study courses and specialized degrees in organic farming at various state universities and universities of applied sciences across the EU.

The rest of the world is somewhat lagging behind Europe in terms of integration of organic agriculture in public education programs, but several countries have started the process in the past 10 years. Below are a few examples from developing countries.

In **India**, almost all agricultural universities offer some education in organic farming, and some offer a full course. Himachal Pradesh Agricultural University in north India and the 4 agricultural universities in Karnataka (south India) have set up departments of organic farming. In 2016 the State of Gujarat announced it would set up India's first university exclusively dedicated to organic farming and research. Initial funds (EUR 1.4)

<sup>62</sup> One is the EcoNewFarmers project between 2014 and 2016. It included seven partners from seven EU countries produced a curriculum for a mobile learning course on ecological farming, and a database of institutions and trainers focus in ecological farming. Another such EU-funded project is the Euro-EducATES project, initiated in 2015. It aims to develop and disseminate common and innovative European educational tools on agro-ecology for agricultural teachers and trainers.

million) have been allocated in the state yearly budget. In the State of Sikkim an organic farming chapter is standard part of elementary school curriculum.

In **Thailand**, the state university of Maejo has declared itself the first Organic Agriculture University in Thailand. This was included in the university's 15-year plan approved in 2012. The university is converting its land to organic agriculture and is opening an organic food center on the campus where students and staff can eat and buy organic products supplied by local organic farmers. Organic agriculture is being included as a compulsory part for all agricultural students (even though students can still learn conventional agriculture methods as well).

In the **Philippines**, the Government established the Cordilera Organic Agriculture Development Center (COARDC) at Benguet State University. The program started with 10 students in 2010 who graduated in 2012, becoming the first batch of certified organic agriculturists in the province. In the school year 2013-2014, there were 41 students enrolled in the program. Other universities have also started to include an organic curriculum. Since 2012, there is also an on-line distance learning certificate course on organic agriculture offered by the University of the Philippines Open University (UPOU).

In Samoa, the School of Agriculture and Food Technology of the University of the South Pacific (which is supported by 12 island nations of the **Pacific Community**) offers a unit on organic agriculture within the course on sustainable agriculture.

The government of **China**, in its 5-year plan 2016-2020, is planning to invest around EUR 187 million in new farmers training. The training will be for farmer and farm managers with a preference for young graduates from college interested in agriculture. The program has a focus on organic, ecological and sustainable agriculture, with the expectation to get one million qualified farmers with international market access by 2020.

In Latin America, **Cuba** has played a leading role in the development of organic content for many of its academic and technical education courses. The CEAS (Center for Sustainable Agriculture Studies) of the Agricultural University of Havana established MSc and PhD programs in Agroecology in the 1990s, and has offered a distance-learning course since 1997. Many other universities and intermediary institutions, such as the Network of Agricultural Polytechnical Institutes, now incorporate organic agriculture in their curricula.

In **Costa Rica** specific degrees are available in organic farming, ranging from short-term courses to Master's with organic agriculture specialization. The EARTH University, a private agricultural university established with the support of the Costa Rican government, has a rather innovative academic approach and teaches organic, as well as biodynamic agriculture.

In **Brazil**, there are many possibilities to study agroecology in a BSc degree or in technical courses. At least 15 universities and educational institutions offer such options. The NGO ELO has also offered a course on biodynamic agriculture since 1986,

which has recognition from the Ministry of education as Post Graduate level of education and for agriculture extension.

Brazil also hosts the first Latin American School of Agroecology (Escuela Latinoamericana de Agroecología - ELAA), which is the result of an initiative of the international NGO Via Campesina, with support from the state government of Parana (Brasil), the Federal University of the State, and the **Venezuelan** government. ELAA is under the control of the Ministry of Education of Venezuela but the curriculum and pedagogy are decided upon by Via Campesina Brasil and Via Campesina International. Similar schools have been created in Venezuela, Paraguay, and Colombia all still with support from the Venezuelan government.

In **Mexico**, 4 universities offer engineering degrees in agroecology. The most renowned is the public university of UACh (Universidad Autónoma Chapingo), which has pioneered the teaching of agro-ecology in the region and influences other agricultural colleges beyond the country.

In **Colombia**, in the nineties, the public education system started including organic agriculture and agroecology in different academic programs ranging from technical levels to postgraduate levels. Several universities offer specialization in organic agriculture or agroecology.

In **Peru**, the ministry of education and the ministry of agriculture support the FORMAGRO project, initiated in 2016 and implemented by SUCO, a Canadian development cooperation agency, to develop and implement agroecology educational programs in technical agriculture education institutions.

In Africa, **Tunisia** is clearly leading in terms of inclusion of organic agriculture in public education curricula, for more than a decade. For more information, see the Best Practice text box below.

In **Nigeria**, the Federal University of Agriculture, Abeokuta (FUNAAB) has started to integrate organic agriculture into their BSc of Agriculture and the organic agriculture group of the university offers a biennial certificated International Summer School in Organic Agriculture.

In **Senegal**, the Ministry of Agriculture has received FAO support of EUR 70,000 for a three-year program in organic agriculture at the Kaydar Center to train young people and help them start as organic farmers. The local municipality also provides one ha of land to these new farmers.

The **African Union** organized, in 2012, regional training workshops on organic standards and certification systems, organic production, marketing and extension support. The workshops were for participants from AU member states, in the context of its Ecological Organic Agriculture Initiative funded by the EU, Switzerland and Sweden. In addition, numerous African institutes and NGOs have been training organic farmers and extension workers for many decades. In **Kenya**, the Kenyan Institute of Organic

Farming has conducted trainings since 1986. Other long-term training institutions are Gako in **Rwanda** and Kasizi Agriculture Training Center in **Zambia**.

In **Armenia** capacity building activities in organic agriculture are included in the EU-funded "Organic Agriculture Support Initiative" project started in 2015 and implemented by the Austrian Development Agency (the project also intends to integrate organic into academic curricula).

#### Best practice example

#### Best Practice Example: Organic education in Tunisia

Tunisia is the leading country in Africa when it comes to organic production and exports. For more than a decade, the Tunisian government has promoted organic agriculture development through a comprehensive set of measures, including the inclusion of organic options in agricultural education programs.

In Tunisia, there are compulsory OA courses at all higher agronomic institutes of learning. MSc degree programs in Sustainable and Organic Agriculture have been developed and offered in some of the higher institutions of learning in the country. These programs serve the dual purpose of training students in Organic Agriculture and as a way of researching organic production systems.

A diploma program in OA was developed to provide professional trainings for stakeholders involved in the country's organic sector. It is jointly conducted by the Agricultural Investment Promotion Agency and AVFA, the Agriculture Training and Extension Agency. The later is a public administration affiliated to the Ministry of Agriculture and in charge of developing and monitoring agricultural education curriculums. It supervises the 39 agricultural professional education centers spread across the national territory.

# Pitfalls and challenges

Policy makers can take decisions that agricultural universities should switch to a more pro-organic curriculum. However, such top-down decisions will face resistance from the lecturers and staff of universities, most of whom have taught plant protection science, biotechnology and agronomy in the conventional way, and therefore may feel threatened by a shift in education priorities. In the case of the Kerala State in India, for example, the teachers' association at the Kerala Agricultural University, the flagship institution for agricultural education in the State, was one of the most fervent opponents to the Kerala 2010 organic policy, even though there were many teachers at the university who supported organic agriculture. Change will take time, and at the level of agricultural education, it may take up a generation of agronomists to get a real broad acceptance of more pro-organic curriculum.

The challenge of providing vocational training is always: is it going to really meet the needs of the farmers? This can be addressed by conducting a needs assessment of future trainees.

Another challenge, particularly with large-scale vocational training programs, is the

availability of a sufficient number of qualified organic trainers. Often, before such large-scale training program is initiated, one needs to implement a national Train the Trainers program. The challenge is similar for inclusion of organic courses in academic programs: in countries where organic agriculture is a new field of interest, there will not be enough qualified teachers to teach this subject.

# e. Conversion and maintenance area payments for organic production

(Note: this type of measure is less likely to be used in Sub-Saharan Africa. We have therefore shortened the section significantly compared to the general report. There are however a few examples of how such payments have been used in developing country situations and those may be interesting for Sub-Saharan African countries to look at).

# Political justification

The failure of the market to adequately recognize the delivery of public goods and the externalities of agricultural production is widely documented. In a number of countries conversion and maintenance area payments for organic farming are used and they partly address this market failure. These subsidies are given in the form of a fixed amount per ha to organic farmers or farmers in conversion to organic.

In early development stages of an organic sector, area payments can also provide the incentive necessary to bring a high number of farmers to convert to organic agriculture, at a time when market demand is not necessarily developed enough to pull so many farmers into conversion.

#### Suitable contexts

Organic conversion and maintenance area payments are not necessarily suitable/feasible in all contexts.

Although they can be implemented at all stages of development of organic agriculture, from embryonic stage to well developed production and consumption stages. They are considered most effective in early development stages because the market is not yet there to absorb supply (e.g. Bulgaria). Area payments are also particularly relevant in an importing country situation where the production is insufficiently developed to meet the demand.

Area payments require an agreed-upon official definition of what qualifies as organic production. Hence they will not be a suitable measure in the context of a country that has neither an organic regulation nor an officially referenced organic guarantee system. As soon as the government has referenced an organic guarantee system defining what is considered organic in terms of standard(s) and control system(s), the measure is feasible, with or without a regulation.

Area payments are typical (but not exclusive) to countries/regions with a culture of government intervention in the agricultural sector, i.e. where the government is used to or open to the idea of significantly subsidizing the agricultural sector. Area payments

are a costly measure, especially when they are implemented nationwide to any farmer willing to convert, and as they need to be high enough to represent a real incentive for conversion. Additionally, area payments require detailed information about producers and a rather complex administration process, which governments with a culture of low intervention in the agricultural sector might not be willing or able to manage.

Organic conversion and maintenance area payments can link well with the various logics of policy support to the organic sector, including the production of positive externalities, increased access to healthy food, and increasing the self-sufficiency of the organic sector. They are a bit less relevant when it comes to the objective of building an export sector to earn foreign currency (as heavy spending on an export sector would cancel out the monetary benefits for the country), except as a transitional measure at an early stage in order to build a critical mass of producers that would enable the reaching of a competitive scale for exports.

# Possible modalities of implementation

The most common way in which direct area payments to organic farmers have been implemented is through multi-year subsidy schemes to which farmers apply in order to get the subsidy. The subsidy is usually differentiated in amounts depending on various categories of production (sometimes differentiated to the crop level for certain crops), and there may be a different subsidy for areas under conversion and for already converted areas (maintenance). Usually, conversion payment rates are higher than maintenance payment rates because the farmer is not yet getting a premium price for his products.

#### Country examples

Conversion and maintenance area payments have been the cornerstone of public support to organic farming in Europe and an important driving force for the expansion of organic farming over the last two decades. **All EU member states**, except the Netherlands, now provide area conversion and/or maintenance payments, which is the most important type of support to organic farming in financial terms in the EU.

**Turkey** also provides area payments to organic farmers. Organic farmers receive area support payments for environment-friendly farming and culture techniques, under Decision No. 2012/3106 on Agricultural Supports of 2012 and the Notification No. 2012/60 on Support Payments for Organic Farming. In 2013, payments for organic agriculture amounted to around EUR 200 Euros per hectare for fruits and vegetables, and EUR 40 per hectare for field crops.

In **India**, under the Paramparagat Krishi Vikas Yojana (PKVY), farmers that participate in clusters comprising 50 acres of organic land can receive a total subsidy of around 275 Euros per acre for the first three years. See more information in the Best Practice Example below.

In Costa Rica, the government set up, in 2007, a conversion area payment scheme that

supports small and medium organic farmers for a period of three years, with a few hundred euros per ha depending on the crop (payment rate is based on a complicated formula but the minimum is EUR 77 per farm). This subsidy program is financed through a tax levied on fuel.

# Best practice example

#### Best Practice Example: India's Paramparagat Krishi Vikas Yojana (PKVY)

For many countries, especially those in the developing world, it will not be financially possible to provide area payments to all organic farmers. India is implementing an alternative scheme that provides area payments to farmers based on the objectives to support domestic organic market development and participatory guarantee systems. The subsidy, about EUR 275/acre for three years, is provided to farmers who are organized in clusters and collectively holding 50 acres or more of organic land. The subsidy covers a variety of costs, such as input purchase and harvesting and transportation costs. Certification costs are covered by the government in a separate program. Subsidies are awarded on the basis of applications for subsidy from the organizers of the clusters, which are administered by the Indian States. A 3-year national budget for PKVY of about EUR 55 million is allocated to Indian States based on a weighted formula taking into account the State's percentage of cultivated land, number of small/medium farmers, area under organic cultivation, and existence of a declaration and work plan for implementing an organic program. The program for North-Eastern States is administered regionally in the context of a special mission for organic farming. The aim is to form 10,000 clusters in the period 2016-2019 and bring about 500,000 acres of agricultural area under organic farming.

## Pitfalls and challenges

The biggest challenge in the adoption of area payments for organic agriculture is often the lack of sufficient government budget resources to finance such a measure. It is more likely to be feasible (and considered acceptable public expense) in the context of countries that already have a culture of providing subsidies to the agricultural sector. This is rarely the case in developing countries. Another problem for least developed countries is the difficulty for farmers to apply and for governments to administer the scheme. The payment schemes require application by the farmer and submission of information. This is a barrier to implementation and therefore effectiveness of the programs, particularly in countries with high percentages of smallholder farmers (many who may live in remote villages) who may lack capacity to apply.

Area payments are a very strong "push" measure. If they are not accompanied by "pull" measures, they risk creating strong market imbalance (growth of organic production without demand growth) and lead to prices falling, which in turn decreases the incentives for farmers to convert or stay organic. This effect however is tempered by the fact that, for most organic commodities, the price is now set at the level of the global market.

# f. Support for agri-environmental practices compatible with organic production

(Note: this type of measure is less likely to be used in Sub-Saharan Africa. We have therefore shortened the section significantly compared to the general report. There are however a few examples of how such payments have been used in developing country situations and those may be interesting for Sub-Saharan African countries to look at).

# **Political** justification

Governments can provide subsidies to support the production of positive externalities by agriculture, such as the production of environmental services, or impose regulations, fees or taxes to limit negative externalities by agriculture, such as nutrient leaching or erosion. The rationale for such policy intervention is that the market alone does internalize costs or benefits related to the environmental impact of farming practices. For example, avoiding nutrient leaching will save public resources in terms of water treatment, but it is often an additional cost for farmers who, without subsidies might not be inclined to perform this service. Another example is the protection of biodiversity, which is a public good that farms can promote, but again, often at an additional cost.

#### Suitable contexts

As these types of policies are not targeted directly at the organic sector, but benefit a broader range of producers (among whom are organic farmers), it can be implemented at any stage of development of the organic sector and in any organic regulatory environment. However, such measures are typically only implemented by countries that have a culture of high government intervention in the agricultural sector: countries where it is commonly accepted that the government should intervene in the agricultural markets with taxes/subsidies to correct market deficiencies and/or to economically support the agricultural sector.

It will not be a relevant measure if the only policy objective to support organic is to earn foreign currency, but for any other policy rationale, it will be relevant.

## Possible modalities of implementation

Subsidies for agri-environmental measures that are highly compatible with organic production include for example subsidizing soil erosion control practices, planting trees, or the use of green manure crops.

Farmers may apply for agri-environmental subsidies with a plan showing how they will manage their particular fields in compliance with the requirements set for each specific measure. Some of the agri-environmental practices linked to direct payments may need to be verified by external control of the farms (either on a sample basis or as a prerequisite for payment). Alternatively, the management, including application and control, could be taken over by a local supporting NGO for entire groups of farmers willing to engage in the promoted practice.

# Country examples

In **Mexico**, the government disburses subsidies for environmental services such as carbon sequestration, water protection, and biodiversity. These are large subsidy programs. For example, between 2001 and 2012, the Ministry of Agriculture invested EUR 27 million into the Soil and Water conservation program, with around 1,4 million producers benefiting. Many organic producer groups have benefited from those subsidies.

In **Colombia**, the Checua project has supported since 1998 soil and water conservation practices and more generally conservation agriculture with a focus on ecological and organic approaches. The project has been implemented by Colombia's Cundinamarca regional corporation (CAR), a government agency in charge of enforcing the country's environmental related policies, in partnership with the German Ministry of Cooperation. It has produced results that are widely recognized within the country and beyond.

## Pitfalls and challenges

Complexity and multiplicity of agri-environmental support measures are challenging for farmers, particularly illiterate farmers. They also represent important administrative costs for the government. In cases of multiple policy targets that are well served by organic farming, it may be more efficient, from a societal cost point of view, instead of using too many different agri-environmental subsidies, to use multi-target policy instruments such as organic farming area payments<sup>63</sup>.

In particular country situations there is a challenge in the administrative implementation. For example, in India, under the National Project on Management of Soil Health and Fertility, financial assistance of around 7 €/ha is offered to promote the use of organic manure and provided on the basis of project proposals received from States. However, several reports indicate that although subsidies are allocated, they are not reaching farmers.

## g. Tax breaks for organic operators

# **Political justification**

A tax break targeted to organic operators is a way to incentivize organic businesses and favor private investment (and potentially attract foreign investment) in organic operations, in recognition of the positive market externalities that such operations generate. Although tax breaks for organic operators may be subject to qualifying criteria and conditions, one advantage of tax breaks is that they do not distort so much

<sup>&</sup>lt;sup>63</sup> For a detailed economic explanation of this argument, see Schader C. et al, 2014, The role of multi-target policy instruments in agri-environmental policy mixes, in Journal of Environmental Management 145 (2014).

the production and business choices and they leave operations the freedom to make investment decisions based on market opportunities. Reducing income tax is a way to increase return to capital and labor, and therefore to encourage more investment, as well as job creation in the organic sector.

A low tax level on the organic production and processing sectors also has the effect of increasing international competitiveness and therefore favoring export activities, or import substitution, while still remaining within the realm of WTO-compatible measures.

Tax breaks can also be a useful complement to area payments, especially to support organic farmers with very small land area who would not otherwise benefit substantially from area payment support (e.g. this was installed in France in 2006 and continues up to now). Income/profit tax breaks may also favor those with active management over those who are only interested in subsidies.

One advantage of tax incentives is that they do not require an actual expenditure of funds by the government. Although the economic impact of an expense and a missed income should normally be equivalent, for political and other reasons it may be easier for the government to agree to provide tax benefits for organic operators than to agree to dedicate a specific budget line for expenses towards the organic sector. Especially if a limited budget has been allocated to support the organic sector, tax incentives may come on top of this budget.

# Suitable contexts

Tax breaks for organic operators can be implemented at all stages of development of the organic sector. They are however only suitable for the contexts in which there is an agreed-upon definition of what constitutes organic (who can be the beneficiaries of a tax exemption) and this requires either an organic regulation or an officially referenced organic guarantee system.

Tax breaks for organic operators are feasible to obtain in any culture of government intervention in the agricultural sector. A tax break may be an easier measure to install politically, than a subsidy.

Tax breaks for organic operators can be relevant to any rationale for policy support to organic agriculture.

#### Possible modalities of implementation

There are various types of taxes on which tax breaks can be applied in order to give a small financial advantage to the organic sector. In principle, a tax credit is a financial incentive that allows certain taxpayers to subtract the amount of the credit from the total they owe the state. So it produces a similar benefit as a grant, for those who pay taxes higher than the amount of the tax credit. Depending on which tax the credit is applied to, and what can be subtracted from the tax (a fixed amount, or certain eligible expenses), the effect of the tax will actually support one or the other aspects of the

organic supply chain (e.g. production, processing, export, import). The ultimate version of a tax credit is a tax exemption: where the state renounces tax on organic operators or on the sales of the products targeted by the measure.

If the goal is to encourage organic production, and to support small organic farmers, a tax credit on the farm income/profit tax can be set. This can be of a fixed amount per farm (e.g. in France). An alternative to a fixed amount of tax credit is to allow organic farmers to deduct from their final income tax amount certain types of eligible farm expenses (e.g. certification or equipment). In practice, this acts as an income subsidy for organic farmers, but it may also (depending on the calculations) encourage farm investments in organic production. It is however only relevant in contexts in which farmers are paying significant income/profit taxes.

It is also possible to set a temporary income/profit tax credit or even complete tax exemption to support the initial conversion or start of an organic business. This was done for example in Tunisia, with an income tax holiday period of 10 years for new organic operations. The Philippines foresaw a similar approach with an income tax holiday and exemption for seven years for organic operations and input producers. However, this has not been implemented to date.

Sometimes, fiscal advantages like some of those mentioned above may not be set specifically for the organic sector, but organic investments (investments by organic operators) may be officially recognized as fulfilling the eligibility criteria for more general schemes that aim at providing fiscal advantages for "green" investments. This was for example the case in the Netherlands with the MIA and Vamil schemes (see country examples).

# **Country examples**

**Tunisia** introduced a number of measures to attract local and foreign investors to organic agriculture. One such measure is a full income tax exemption through the first ten years and another 10% exemption thereafter. In the same vein, full tax relief is provided on income and benefits reinvested as part of the starting capital in organic agriculture companies.

In **Costa Rica**, the law foresees a range of tax exemptions for organic farmers. However, to date, only the tax exemption on the purchase of equipment, vehicles and machineries has been implemented.

## Pitfalls and challenges

There are cases (such as The Philippines, and partly in Costa Rica) where a range of tax exemption measures for organic operators have been authorized by the government but they have never been effectively implemented due to lack of uptake by the responsible ministries (e.g. custom and finance ministries) and because the administrative procedures involved are too complex to set up.

Even when the measures are effectively implemented, there remain important challenges in their uptake by operators. As with other types of subsidies that require beneficiaries to apply through an administrative process, the main bottleneck in the uptake of such support is the lack of information for potential beneficiaries: often, a significant share of farmers do not benefit because they are not aware. Communication targeted to organic farmers should accompany such schemes.

Aside from the lack of information, beneficiaries may also not apply due to the cumbersome bureaucracy needed to obtain the tax exemption (e.g. in the Philippines, organic food and input producers are exempt from all income taxes levied by the national government for a period of seven years, but in practice very few requests have come from small producers due to bureaucratic application procedures.

Corruption is another risk. The opportunity for corruption is much greater for tax incentives regimes where officials have wide discretion in determining which investors or projects receive favorable treatment. The potential for abuse is great where no clear guidelines exist for qualification. Therefore the qualifying criteria should be simple, specific and objective to minimize the discretion afforded officials that grant the incentives and to provide guidance to tax authorities charged with monitoring and enforcing the tax incentive regime.

# h. Support for organic farm investment

## **Political justification**

For any commercial sector, the quantity of private investments is a decisive factor for sector growth. Organic agriculture is no exception to this economic reality. This is particularly true for the conversion process: conversion to organic farming can be costly in terms of initial investment such as new machinery, adaptation of livestock facilities, integration of on-farm processing facilities, or organizational investments such as setting-up internal control systems for smallholder group certification. Additionally, there is another form of "investment" required during the transition period in the sense of building soil fertility and recovering from the initial yield drop: those absorb much needed financial resources at a time where the other more physical investments are also needed. This makes farm investment support a very important element to facilitate conversion.

Smallholder farmers are also the ones whose production systems are best suited to organic agriculture, but again, their investment capacity is very limited – another reason for public support. The higher diversity in organic production makes it harder to achieve economies of scale for specialized machinery, which is an argument in favor of supporting such investment, possibly for groups of farms together.

#### Suitable contexts

Support for organic farm investment is possible at any stage of development of the organic sector. It is easier in context where there is a clear legal definition of what is organic (i.e. an organic regulation or a legally referenced organic guarantee system), but it is not impossible in other cases: for example, the government may decide to give support for certain types of farm investments which are known to be particularly useful for organic operators, such as mechanical or thermal weeders, mesh nets, compost turning machines, etc.

Support for farm investments can be obtained under various cultures of government intervention, although it will be more difficult in the case of low interventionism culture.

Support for farm investment is relevant to any of the objectives for policy support to organic agriculture.

#### *Possible modalities of implementation*

Farm investments may be incentivized through various policy instruments, including subsidies, grants, loans with reduced interest rates, tax credits (see previous section), etc.

Farm investments can be encouraged on an individual basis (farmers apply for the incentives individually) or on a collective basis (incentives available for farmer groups and cooperatives that share equipment and machinery, for example). Support to groups have the potential to also foster cooperation in other ways, e.g. in marketing.

# **Country examples**

In **Turkey**, organic farmers can receive credits with 50% interest rate cut.

In **Tunisia**, decades ago the government introduced subsidy packages aimed at increasing farmers' productivity, reducing production costs and enhancing organic product exports. By decree, equipment specific to organic farming has been subsidized by 30% since 1994<sup>64</sup>. The Agricultural Investments Promotion Agency (APIA) also coordinates government investments in the organic sector and helps secure government funding of organic projects in the country. By 2010, at least 52 OA projects, worth more than EUR 42 million had been funded by the government following APIA's endorsement.

In **Brazil**, subsidized credit to support investments for organic farms is one of the actions in the PLANAPO (national plan for organic agriculture). An exclusive credit line for organic agriculture<sup>65</sup> was launched in 2013. Under this program, interest rates are

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<sup>&</sup>lt;sup>64</sup> Article 12 of the decree n°94-427 of February 14, 1994 (amended by the decree of September 13, 1999)

<sup>&</sup>lt;sup>65</sup> The so-called PRONAF-Agroecologia.

set at 2.5 % whereas rates offered to conventional operations are about 7%. There is a maximum limit of EUR 82,000 per individual farmer or EUR 206,000 for collective projects (machinery in cooperatives, etc.).

In **China**, several local governments have supported organic farm investments. For example, in 2010 Chengdu, the largest city in Southwest China, introduced financial supports for infrastructure investments such as building greenhouse facilities and road access for organic farms. The local governments of Shanghai and Beijing also have such support. The council of Agriculture of Taiwan also subsidizes green houses investments and the purchase of machinery necessary for organic farming and provides low interest rate loans to organic operators.

# Pitfalls and challenges

Investment support (especially when in the form of grants/subsidies) means that beneficiaries receive a lot of money at once (or in a short time) for being organic. The main challenge of such support policies is to ensure that the beneficiaries will really stay in the organic sector. There have been cases of some opportunistic behavior of operators becoming organic in order to qualify for the grant aid and reverting to conventional farming once the commitment is over. Options for avoiding this problem include:

- Restricting preferential treatment to those organic farmers whose farms are wholly converted or who market their product as organic or are willing to do so should their application be successful, linking support to a long-term commitment (e.g. 5 years) and to connecting the producer to the premium organic market.
- Focusing the investment support on machinery and equipment that are specifically needed in organic agriculture, such as mechanical and thermal weeders, grinders and compost-making machinery, compost and manure spreaders, insect proof mesh, etc.

Credit with reduced interest rates lowers the risk of opportunistic behavior because the benefit is less immediately tangible, but it has other disadvantages. Some countries (such as Costa Rica) have authorized such a support measure but did not implement it, due to the lack of cooperation with/by the banks. Unless the government covers the gap in profit by compensating the banks for the reduced interest rates they offer to organic operators (e.g. in the case the Netherlands Green Funds Scheme), those banks hardly see a reason to offer such discounts.

Reduced or no-interests credits are particularly beneficial in contexts of high interest rates and in areas where access to finances (for farmers) is difficult (this is, for example, often the case for smallholders in Africa).

Even when the credit lines are (theoretically) open, it does not guarantee that the benefit will reach the producers; there can be problems in the uptake of those schemes. For example in Brazil's case (see country examples) data for the years 2005 to 2010 shows that the total resources granted by PRONAF - Agroecologia were only EUR 3.1 million, through 979 contracts, and that 40% of the budget allocated went to the

Northern Region (mostly to the State of Pará). This represents less than 1% of the total agricultural credit for family farmers granted in the same period, indicating that conventional production systems received more resources through other credit lines. It is likely that this is related to difficulties in accessing credit due to:

- the lack of awareness and preparation from financing institutes (due to the need for a differentiation in the budgets and plans for requesting credits for diversified production systems, which are often also smaller than conventional ones) and
- the lack of awareness on the side of the producers, who do not know about the mechanisms or do not have the capacities to develop the projects to request credit (capacity building for rural projects to request credit has also been an issue).

# i. Support for farm income diversification and agro-tourism

(Note: this type of measure is less likely to be used in Sub-Saharan Africa. We have therefore shortened the section significantly compared to the general report. There are however a few examples of how such measure has been used in developing country situations and those may be interesting for Sub-Saharan African countries to look at).

#### Political justification

Farm (or village in case of some developing countries) income diversification is the process of reallocation of farm resources (i.e., land, labor or capital) into new non-traditional crop or animal production, into processing, packaging and other forms of value addition (including new forms of marketing), or into non-agricultural activities developed on the farm, such as agro-tourism, education of children, etc.

There is a global rise of eco-tourism and agro-tourism. This trend can provide an economic opportunity for countries to derive foreign revenues through activities that enhance the natural, cultural and social integrity of their rural areas.

Public support to farm income diversification and agro-tourism usually benefits organic farms disproportionally, since they fit better with the societal ideal of farming. Their diverse landscapes and non-toxic environments are attractive to the public. Encouraging agro-tourism on organic farms is also a very good way to support market development and create new demand for organic products, since tourists can discover attractive alternatives to industrial food production, and build a relationship with the organic way of farming. Hence such general support measure, even if not targeting organic agriculture specifically, can have a positive impact on developing and maintaining organic farms.

# Suitable contexts

Support for farm diversification and agro-tourism can be implemented at various stages of development of the organic sector, but in very early stages of development it may not be a priority line of action in terms of its relevance for the development of the organic sector.

It can be implemented in all types of organic regulatory contexts. This measure tends to fit more interventionist types of government culture. The measures can often fit under budgets other than the agriculture budget, such as rural development, SME development or tourism. Projects can also be municipal or regional in scope.

Supporting farm diversification and agro-tourism is an indirect way to support organic agriculture but can be relevant to the various objectives of organic support, except the objective to earn foreign currency through organic exports.

## Possible modalities of implementation

The issues of farm diversification and agro-tourism can be dealt with through individual farm incentives. The classical set of incentives (grants, subsidies, loans with zero or low interests, etc.) can be used to support farm diversification and eco-tourism. Such incentives can be given in a general rural development policy context, or the measure can apply only to organic farmers, or organic farmers can be given priority access in the case of a competitive scheme.

Alternatively, the national or local government may deal with farm diversification and agro-tourism issues through a collective approach, supporting community projects and investments to set up other income generating and agro-tourism related activities at the village or district level, like in the cases of Indonesia or Italy. A regional approach to agro-tourism development may include promotion of the region's organic farming image.

## Country examples

Bali, in **Indonesia**, has defined agro-tourism development as one of the strategies to improve sustainable agricultural production and to reduce carbon emissions. Since as early as 1995, local governments in Bali have been supporting community-based agrotourism projects and allocated funds for capacity building activities as well as the building of facilities and communication materials related to agro-tourism. The government is encouraging tour operators to create new tourism packages highlighting the Bali's Simantri program of organic farming, which is in line with the island's efforts to become a green and eco-friendly province. Visitors who purchase the packages will have the opportunity to visit villages where organic farming and green small industries are being developed.

In a similar spirit, the government of Sikkim in **India**, in its 2013-2018 Organic 5-year Plan, foresees the development of the concept of Organic Village Tourism (one model

village in each district, to be developed in coordination with the Tourism department).

In **Tunisia**, the next 5-year development plan foresees the development of Organic Tourist routes in various districts. The concept is still under development. In the **USA**, the State of Vermont has provided some support for the increase of agriculture and culinary tourism, part of which has gone into the Farm-to-Plate initiative, which is the state plan to strengthen the Vermont's food system. In Vermont, about one third of farms derive some income from agro-tourism and Vermont ranks as the first state in the US in terms of the percentage of organic farms.

# Pitfalls and challenges

An effective strategy for agro-tourism development requires a certain level of attractiveness of the region for tourism, particularly for rural tourism (outdoor activities). Hence, this strategy is not a suitable to all regions.

The bio-districts or eco-region concepts can face many challenges inherent to the collective aspect of the projects, trying to create cooperation between a variety of (sometimes competing) actors. To help tackle these challenges, they can benefit from linkages to other eco-regions through networks at the national and international level. Those do not only fulfill a role of promotion towards the public and potential tourists, but also a role of sharing of good practices and mutual learning, as well as gaining political visibility.

# j. Support to companies for organic processing, product development and marketing

## Political justification

Governments can support not only organic producers but also those businesses adding value through processing and marketing. Particularly in those countries with an underdeveloped organic supply chain, such measures may play an important role in bundling organically produced raw products as well as improving and professionalizing organic processing. A larger range of products available in the market, particularly in supermarkets, also enhances consumer choice and therefore spurs demand. Organic producers benefit by selling more ingredients to the processing business when processed product sales increase.

In developing countries, to increase value addition by farmers and farmer groups is a very common strategy. Cooperative processing and marketing can benefit farmers and have multiple spin-offs.

From a trade balance point of view, developing domestic supplies of value-added products keeps money in the domestic economy. It is widely known that processing and export of processed products is often a more profitable business (and brings more

revenues to the national economy) than the production and export of raw materials only. From a food sovereignty point of view, it is also important for a country not to be fully dependent on imports for all processed food items (including organic ones).

#### Suitable contexts

Support to companies for processing and marketing organic products can be implemented at all stages of development of the organic sector, although at a very embryonic stage it can only happen on a very small scale, as organic raw materials are still lacking. Processing and marketing support measures are particularly suited to develop domestic markets in countries where organic farming production is growing or where organic exports have been the main market channel.

This type of support specifically targeted to organic products requires a context where there is a domestic organic regulation or an officially referenced organic guarantee system, which can be the basis to define which operators qualify as organic processors and which do not. It is therefore not well suited to contexts where such official reference is completely absent.

In terms of the culture of government intervention, advocating for this type of measure will likely not be successful where the government intervenes very little and prefers to let market forces drive the agriculture sector and market development. It will be more suited to contexts where the government intervenes more on the agro-food sector, whether through incentives or their own public programs and development cooperation projects.

Supporting organic processing and product development is well suited to any policy objective that aims to develop organic agriculture. Processing products organically is nearly as important as producing them organically, if one wants to bring organic products to the market.

## Possible modalities of implementation

Financial support can be provided to organic companies or cooperatives for processing and marketing ventures. This can include supporting the development of local processing facilities, co-operative marketing ventures, or market information systems, and the participation of companies in domestic trade fairs and exhibitions.

Processing support can be provided in the form of investment support for processing facilities. Typically, such financial support is not specifically reserved for organic, but organic applicants are either granted higher priority, easier access, or higher grants. In the case of Tunisia, however, the 30% subsidy for organic investments was a measure created specifically and only for organic businesses.

Supporting innovation and development in processing is also possible through the provision of free or subsidized technical support. This is most logically done in cooperation with the private sector/civil society partners.

Marketing strategies of organic businesses may also be supported more generally through the provision/financing of general organic market information (e.g. consumer surveys and other types of market studies).

# Country examples

In **Armenia**, the Organic Agriculture Support Initiative, of which the Armenian government is a partner, has a grant scheme for organic processors and is providing marketing support, including participation in organic fairs.

In **the Philippines**, in 2014, the municipality of Kapatagan built a processing unit dedicated to organic rice, at a cost of EUR 58,000. See more information in the Best Practice example textbox.

In **Thailand**, the Ministry of Commerce, funded, in 2015, a national organic market study conducted by the Organic Development Center and Earth Net Foundation. It is the first time in South-East Asia that a national market has been mapped with clear criteria and national market figures have been made available to assist Thai organic businesses to plan their marketing investments and product development.

In **Tunisia**, organic processors receive a subsidy of 30% of the investment costs for equipment needed for organic processing, as per the decree 2000-544 of March 2000. They also receive a 70% subsidy on certification costs for the first five years. Currently, the CTAB (Technical Center for Organic Agriculture) is carrying out an organic market study to target consumer groups and identify products that are in high demand. In **Saudi Arabia**, the Ministry of Environment, Water and Agriculture, through its Organic Farming Project (financed by the ministry and implemented in cooperation with GIZ International Services), has provided workshops to which organic processors and farmers who process and market their own products are invited. The workshops cover topics such as packaging and marketing and are implemented together with international organic marketing experts.

In **Argentina**, the National Institute of Industrial Technology (INTI) develops pilot plants for organic food processing, as per the demands from organic companies. The plants are the property of INTI but can be used by companies for a user fee. Based on the results in those pilot plants, organic processing companies can decide to build their own full scale processing plants.

# Best practice example

#### Best Practice Example: Municipal rice processing facility in The Philippines

Kapatagan, in the Lanao del Norte district of the Philippines, is a rural municipality with a population of around 63,000 inhabitants, and in which rice is the main production. It is a member of the League of Organic Agriculture Municipalities (LOAM-Philippines) with the mission of leading the promotion and implementation of sustainable organic agriculture programs in the country.

In 2008, the municipality's local government made a formal statement to make Kapatagan an organic municipality. Since then, serious efforts towards living up to its self-proclaimed status have been exerted by the municipality through its agriculture office. In 2009, the Local Government Unit (LGU) developed a comprehensive program known as the Agricultural, Coastal, and Environmental Resources Development Program (ACERDEV) in which organic agriculture development was a key component. The municipality decided to place special focus on organic rice production. MASIPAG, the main organic farmers' network in The Philippines, cooperated in the implementation of activities supporting organic farming development.

In 2014, to ensure that organic rice sold in the market is not contaminated with rice produced through the use of synthetic chemicals, the local government unit constructed a processing unit dedicated to organic rice. The unit includes a solar dryer, rice mill and warehouse. As very few organic farmers are third-party certified in the Philippines, the facility is accessible to all organic rice farmer especially those assisted by MASIPAG and organic farmer members of the Participatory Guarantee Systems Iligan-Lanao del Norte Network.

Building the rice processing facility represented a cost of EUR 58,000. It was made possible through the Bottom-Up Budgeting (BuB) Program in partnership with the Department of Agriculture-Regional Field Office wherein 20% of the funds came from the Local Government Unit (LGU) Development Fund and the rest from the BuB. The rice processing unit is managed and maintained by De Asis MASIPAG Farmers Association (DEMFAS) to ensure that only organically produced rice will be processed at the facility. The Local Government Unit regularly monitors the facility and provides technical assistance for its maintenance and sustainability.

#### Pitfalls and challenges

When support measures for organic processing and marketing are integrated into more general agricultural policy support, eligibility requirements may represent a potential barrier to the uptake of the support scheme by organic operators, due to the specificities of the organic sector. For example, if eligibility criteria include a minimum turnover of the company, a minimum investment effort, or a minimum number of farmers for a cooperative to be eligible for support, this may put the bar too high for organic operations, especially in the context of an emerging organic processing sector. It is therefore best to lower those minimum eligibility criteria in the case of organic applicants.

Organic producer groups may lack capital and be unable to meet the co-funding requirements for support programs, and this should be taken into account.

It is essential that the businesses supported are viable, and there is often a need to assist businesses with business planning and with making a realistic profitability assessment.

#### k. Organic supply chain development projects

#### Political justification

Whereas the support measures presented above address one specific point in the supply chain (e.g. production, processing, marketing), policy makers may sometimes want to adopt a more vertically integrated approach by supporting projects that focus on developing a particular commodity's supply chain.

Contributing to supply chain development can help achieve a government's sustainable economic development objectives. Supply chain (or "value chain") development is undertaken by many public-private partnerships globally, as governments, development agencies and businesses seek win-win-win arrangements. A report from the SEEP Network (<a href="www.seepnetwork.org">www.seepnetwork.org</a>) observes, "No matter the country or sector context, support from government actors often dictates the extent to which businesses can thrive and grow or stagnate and collapse." For emerging organic sectors in developing countries, this statement rings especially true. Where organic producers are few and organic buyers scarce, government facilitation raises profiles and enables linkages that will help build a functional sector. This is equally applicable for long export-oriented supply chains and short regional ones. In development cooperation, supply chain development is often a fundamental strategy for the integration of small farms in the modern economy.

Supply chain development projects can be:

- Projects that link research-capacity building and input provision, for example, to provide an integrated approach to encouraging conversion of a particular production,
- Projects that link production, processing and marketing, and/or
- Projects that aim to improve the structure, logistics or traceability of supply for a particular sub-sector.

There are several reasons to focus on the development of a particular supply chain. These include:

- To address structure problems in one particular sub-sector where domestic demand is not adequately met (for example, if organic vegetable producers in a given country are too small-scale and not organized enough to supply mainstream channels like supermarkets)
- To create an organic supply chain for a particular export commodity, or increasing efficiency in an existing chain, to provide a valuable source of export revenues in the future and/or address environmental problems with current conventional practices in that sector.

Regardless of the objective, the advantage of such an approach is that it connects the various actors of a particular supply chain and fosters dialogue between producers, traders, processors, and potentially researchers as well, to solve the problems of that particular supply chain in an integrated manner.

#### Suitable contexts

Integrated supply chain development is a form of support measure that can be suitable to all stages of development of the organic sector, from the embryonic stage to the near-to-mainstream stage.

It can also be implemented in any type of regulatory environment.

As a very intensive type of support, support to value chains with one or a few commodities will typically be difficult to obtain in a context where the culture of government intervention in the agricultural sector is generally not to intervene.

This form of support is well suited to any of the rationales for policy support to organic agriculture. Whether it is to develop export value chains or to increase self-sufficiency in organic products, an integrated value chain approach will offer interesting advantages.

# *Possible modalities of implementation*

Supply chain facilitation should be flexibly defined depending on the circumstances. It should also have flexible implementation as new bottlenecks emerge once some are resolved, and intervention focus may have to shift between the various stages of the chain.

Supply chain facilitation can be restricted to the linking of sellers to buyers. Or, it can go way beyond that and include other actions to support the commerce of these chains, including but not limited to establishing standardization and quality systems through the chain, development of infrastructure and transportation, and navigating import and export regulations. Regardless of the intensity of the support action, supply chain development is done in the form of time-limited projects or programs. The idea is that once the supply chain is well developed, it must run on its own.

In developing countries, the classical development cooperation types of projects are implemented, starting with providing training to farmers for conversion, organizing for certification and linking producers to markets. The model is also being applied in "economies in transition" countries, such as the Organic Agriculture Support Initiative development cooperation project in Armenia. In both cases, projects often include the aspect of cooperation amongst farmers producing the same commodity (usually setting-up farmer cooperatives, farmer groups or other structures), to resolve production issues, but also for joint marketing. However, an alternative model to the farmer-led cooperative/group is to have supply chains that are organized by the exporter or by the processor and in which farmers are simply contracted. In such cases, the supply chain development project works with the exporter or processor companies to develop the supply chain.

# Country examples

In developing countries, it is guite common for supply chain projects to be funded

through external donors and NGOs, or through development cooperation. Many of them have proven very successful at developing a particular organic supply chain in a country, for an export commodity or even for developing a local supply chain. Some projects worked on single commodities, others on a broader sector (sometimes on organic as a whole sector segment). The examples below are a mix of private-led and public-led projects. Even though in private-led projects the initiative or funding may not have come from the local government, those examples can be useful inspiration as similar project approaches can also be organized and/or funded by the national government.

In **Kyrgyzstan**, the Helvetas project "Organic cotton production & trade promotion project" was implemented from 2003 to 2015. It resulted in an increase of organic producers from 38 to 1,408, of organic cotton area from 122 ha to 2,967 ha, and of organic cotton production from 24mt to 335mt of cotton lint. During the first stage of the project (2003-2006), a value chain was established for organic cotton as a leading crop, with a focus on training extensionists and farmers in organic farming, and then signing the first organic cotton production contracts. To maintain the stability of the value chain, during the second phase of the project (2007-2011), a local structure was set up in the form of the Public Union of Bio Farmers (a cooperative which now involves 1,200 members) and Public Fund Bio Service (a consultancy that offers training, certification and marketing of organic products).

In **the Philippines**, the provincial government of Nueva Vizcaya and Department of Agriculture jointly constructed and opened a multi-functional Regional Organic Trading Center (ROTC) in Nueva Vizcaya (North Luzon). The costs of the project (around EUR 300,000) were supported by the National Organic Agriculture Program funds and Japanese NGOs. ROTC is managed as a public facility by the regional office of the Department of Agriculture. It provides organic farming demonstration, processing facilities, market promotion/trading facilities and training events. The center has an agribusiness development center, an organic native chicken production center, an administration building, a fruit processing and packaging building, a wild pig conservation and production center, and a GAP vegetable production area. It also serves as a drop-point for organically produced vegetables, fruits and meat. In this way the products of farmers will be further promoted and can be easily accessed by the customers, as it is located in proximity to a major commuter highway and a general agricultural research and development agency.

In **East Africa**, and particularly in Uganda, the EPOPA project (Export Promotion of Organic Products from Africa) was the main engine behind the development of the organic sector in Uganda, Tanzania and Zambia. EPOPA was a project funded by the Sida (the Swedish International Development Co-operation Agency) between 1997 and 2008. The program supported the inclusion of more than 100,000 farmers (among which 54,000 were in Uganda) in organic export supply chains for a range of different commodities (traditional cash crops but also fruits and vegetables for export). The EPOPA projects worked in the form of three-five year projects with various types of exporters including cooperative unions, local and expatriate entrepreneurs and subsidiaries of international trading houses, and the participation of large groups of

smallholders that were organized by exporters, with assistance from EPOPA technical consultants. EPOPA provided training to farmers and companies, research and extension support, technical and financial support including for certification, and market linkages to the selected partners. Additionally, EPOPA supported the establishment of domestic certification bodies, the training of various other actors in the organic movement, and their organization into national associations. EPOPA was also involved in facilitating marketing-related promotional activities, such as participation in organic fairs and in establishing a database of market contacts.

The government of **Ghana** was quite an early supporter of several organic development projects implemented in the 1990s, such as the Abrono Organic Farming Project supported by the Department of Forestry and the Environmental Protection Agency of Ghana, the Sedentary Farming System project and the organic rice-fish projects supported by the Ministry of Food and Agriculture. Government officials from the Environmental Protection Agency and the Ministry of Food and Agriculture also participated in the Organic Farming Promotion Project.

The government of **Turkey** partnered with the German government in the form of a bilateral cooperation project from 2011 to 2013 to develop quality organic supply chains from Turkey to European markets. The project was implemented by FiBL Germany in close cooperation with the Turkish Ecological Agricultural Organization (ETO). The project worked with the various stakeholders of the Turkish organic supply chain including government regulatory personnel to build capacities and to established exporter-importer connections.

In **Nepal**, the Jumla District Agriculture Development Office (DADO) decided in 2007 to make the district an organic district. As the district was specialized in apple production, the DADO sought help from foreign donors and established a project to develop the organic apple value chain. The project activities included training on production, support for certification, facilitating transport of the apples to the markets, identification of buyers and brand marketing.

In **India**, the federal government launched in 2016 a comprehensive scheme called the Mission Organic Value Chain Development (MOVCD) for North Eastern Region, as a Sub-Mission under the National Mission for Sustainable Agriculture (NMSA). The MOVCD scheme is comprehensive in its approach and aims at developing certified organic production in a value chain mode to link growers with consumers. It supports the development of the entire value chain starting from inputs, seeds, certification, to the creation of facilities for collection, aggregation, processing marketing and brand building initiatives. Government of India allocated EUR 16 million for MOVCD in 8 North Eastern states for the fiscal year 2016-17.

# Best practice example(s)

#### Best Practice Example: Organic Apple Value Chain development in Jumla District, Nepal

The Jumla district is one of the poorest areas of Western Nepal. The district has only seasonal road connectivity to the rest of the world, and farmers have been mostly unable to afford

chemical fertilizers and pesticides. Its temperate to alpine climate is suitable for apple production, but there have been tremendous difficulties in marketing the apples produced in the district. Before 2007, only 5% of the total production (4,600 tons) was successfully exported out of the district and the majority was dumped as mulch.

In 2007, the District Agriculture Development Office (DADO) of Jumla decided to make the district organic and seek support to develop their organic apple value chain. Import and use of chemical fertilizers and pesticides in the district were banned. The DADO sought the support from SNV Netherlands Development Organization. A value chain analysis of Jumla apples in the region was first conducted with SNV support, to identify the limitations and opportunities. With the leadership of Jumla DADO, SNV facilitated the formation of a multi-stakeholder forum – the Jumla Apple Forum – which included the participation of producer groups, the local Chamber of Commerce and Industry, District Development Committee, and several development NGOs working in the district. The purpose was the development of a basket mechanism to channel all development efforts for apples coming through public, private and development agencies to this sector and the implementation of joint action plans. SNV also supported the capacity building of Jumla DADO on organic apple orchard management.

A pilot project was set-up, whose purpose was to link the high-end organic markets in Nepal to those certified organic apple producers of Jumla who could provide guaranteed quality and consistent supply. The project activities included training on production, support for certification, facilitating transport of the apples to the markets in Kathmandu, identification of buyers and brand marketing. One of the innovative actions was the facilitation of agreements between Jumla apple producer groups and Yeti Airlines - a national domestic carrier with regular flights to Jumla - to prioritize transportation of Jumla apples to Surkhet or Nepalgunj, from where road transportation begins, on a commercially viable fee basis.

Certified organic apples started to be marketed under the brand Jumla Organic (created by the DADO) and sold in supermarkets and organic outlets in the domestic market. One major success was that the apple price increased in Jumla from NRP 10/kg in 2008 to NRP 35 and NRP 25/kg for organic certified and non-certified respectively. By 2009, 300 farmers belonging to three pilot projects had experienced an increase of 250% in their usual gross margin.

## Pitfalls and challenges

The first challenge of supply chain development projects lies in the risk associated with the choice of the one or more commodities to support. A commodity-focused project starts with the assertion that there is true market potential for the organic commodity selected, that production is competitive, and that producers will want to continue with this commodity and not move to an alternative more profitable one. There is, of course, the risk that this assumption does not materialize in the medium/long run, due to market price volatility and other issues. Proper preparatory work and assessment of the market potential, competition, cost structures and supply capacity are essential.

The focus on one or a few commodities, inherent in value chain projects, can sometimes be hard to combine with the emphasis of diversity in organic production. It may be a challenge to find markets for other commodities produced by farmers alongside the main cash crop.

Another challenge of such supply chain integrated projects is that they aim to act on various levels of the organic supply chain, and therefore require broad competence and stakeholder involvement in order to design effective strategies. Projects that support an export supply chain require good knowledge of foreign markets - how they work, their regulations, and their quality expectations. Projects that adopt a more territorial/domestic approach often require a smart strategy of involvement of the various territorial actors (beyond the organic chain itself) in order to gain public support for the action and to build ownership for the future outcome.

Even if there are many relevant stakeholders in a supply chain, there needs to be clear leadership in the chain development, and external consultants or agencies must be careful not to take over the responsibilities of the actors, in their effort to support. The supply chain leader will in most cases be an exporter or a food processor and their competence and capacity may be lacking. In projects with farmer groups in developing countries, the supply chain leader is often supposed to organize certification and also farm extension work. But commercial companies may often lack the knowledge of farming and how efficient extension is carried out. In addition they mostly orient their work solely to the commercial commodity. As an alternative NGOs or government agencies can manage the extension function, but they might lack the commercial focus that is a prerequisite for a successful chain.

Like all project approaches, in which the support of a particular activity is intensive but time-limited, another important challenge is sustainability when the project ends. Capacity building activities usually pay-off in the long run if the market channels can be maintained, but projects that subsidize certification costs for a period of a few years as a way to support the entrance of newcomers in the organic business face the risk that they may drop off after the support ends. Another challenge is the fact that building value chains can take a long time and project-funding cycles are sometimes too short for these types of complex and long-term projects. Nevertheless, there are many success stories that have been initiated with certification subsidy and other forms of temporary subsidization of organic businesses, like the EPOPA project in East Africa.

The project approach that aims at building organic businesses in a particular region where they do not exist also faces the challenge of finding entrepreneurs who are interested and able to go into organic, and competent enough to continue building the businesses after the end of financial and technical support from the project and its consultants.

The success of value chains is also dependent on trust and a mutual interest by the actors in the chain. It will not succeed if any actor tries to get only advantages without consideration of the other actors' agenda.

Public-private cooperation is another challenge. Many of these projects are only private and do not integrate public institutions enough, while when governments take the lead, involvement of the private sector, especially in the design of the project strategy, is often too weak.

## 3. "Pull" measures

# a. Consumer education and promotion campaigns

#### Political justification

Increasing household consumption of organic products is one of the main "pull" measures to increase demand for organic products. The main bottlenecks to increase household purchase of organic products are: 1) product availability in various market channels, 2) consumer awareness of organic benefits, and 3) product attractiveness including quality and price.

Consumer education campaigns are an important mechanism in increasing consumer awareness about organic products across the board. Especially in emerging sectors, the organic industry itself does not have sufficient resources (and is often not sufficiently linked) to fund mass public education campaigns, which can be very costly. Also, since this is a matter of education and public health, as well as environmental public goods, there is political rationale for the government to put public funds into such campaign.

In a market economy, incomplete information on the side of the buyer is a main reason for what is called "market failure". Without all consumers understanding the benefits behind the organic label, the organic market operates at a sub-optimum level. This may justify government intervention on the level of consumer education.

To be effective all policy measures aiming at increasing the accessibility of organic products by consumers must also be accompanied by consumer awareness actions.

## Suitable contexts

Consumer awareness of organic agriculture can be implemented at various stages of organic agriculture development, and regardless of the culture of intervention of the government on the agricultural sector. However, consumer awareness campaigns for organic agriculture are most efficient when there is an officially referenced organic guarantee system or an organic regulation. This is because consumer awareness of the benefits of organic should ideally be combined with the promotion of the national organic logo, which enables consumers to identify organic products (and such a logo needs to be backed up by an agreed-upon guarantee system). The launch of a national organic logo is typically the ideal period to launch a consumer awareness campaign to explain what stands behind the logo. However, consumer awareness campaigns should be repeated regularly to reach an ever-increasing share of the population as the availability of organic products increases in various market channels.

Consumer awareness campaigns aim to increase domestic demand, and therefore are not relevant to the policy objective of wanting to earn foreign currency. They are also not, as such, relevant to the policy objective of increasing self-sufficiency (replacing the import of organic products by domestic production), except if combined with a campaign for local (domestic) organic products (as in the example of Canada or Switzerland below).

#### Possible modalities of implementation

Public support to consumer awareness raising activities takes place under various policy instruments.

In some countries, organic consumer awareness activities are decided as part of the national organic action plan or set of measures (e.g. Denmark, Tunisia, Bhutan) or are even written into the organic policy adopted by the parliament (e.g. Costa Rica, Turkey). They can also be decided and financed through a special government-funded project (but those are then time-limited activities like campaigns) such as in Saudi Arabia or Canada.

Brazil is an interesting case where the organic unit in the Ministry has managed to secure long-term commitment to the Organic Week campaigns (held annually for over a decade) by including it both in the Multi-Year Plans of the Federal Government (prepared by the Government and approve by Congress every four years) and in the National Plan for Agroecology and Organic Production which is launched by the President and commits four different Ministries to implementation.

Cooperation with the private organic sector is highly recommended when it comes to consumer campaign activities. A typical setup is where the organic umbrella organization manages the campaign, the Ministry and potentially external donors cofund it, and the domestic industry (organic companies) also contributes funding.

Retailers are strongly involved as partners in the implementation. Government support can incentivize and leverage important private contributions. For example, in Canada, the EUR 400,000 government funding was completed by EUR 600,000 Euros private sector investment in the campaign.

In Brazil, the federal government transfers a small budget to each state for implementation of local specific actions and events for the Organic Campaign. Each state can define its own activities in line with the theme and guidelines developed by the organic unit in the federal ministry. Actions in the various states are also co-financed by local public and private entities.

In any case, before any significant action is taken the existing situation should be assessed through consumer surveys in order to better understand the profile, concerns, and shopping habits of both the existing organic consumers and the potential new ones.

The types of consumer awareness raising activities supported through public funds include general information for the public about organic food and agriculture through a permanent website, booklets and brochures, TV and radio programs, newspaper

articles, billboards, and more recently and increasingly social media. But also, very importantly, commercial actions such as special product displays and tasting are carried out in shops, special organic product fairs, and open farm days where consumers can come into direct contact with organic products and organic farming. Packaging the promotion activities in the form of an annual time-limited action, such as Organic Action Days or an Organic Week or an Organic Month every year is a popular format of action. Promotion campaigns are usually targeted at consumers or the wider public but they might target, as an intermediary step, retailers, caterers and schools, who then become partners in targeting consumers.

Organic promotion campaigns often associate the national organic logo with a slogan or a set of special messages that are repeated over multiple communication channels and in multiple locations (e.g. Canada, Saudi Arabia).

Policy makers may also contribute to raising public awareness about organic agriculture in their speeches or government declarations. For example, if a president or minister makes a statement in favor of organic agriculture, this sends an important signal to the media and to the general public, including consumers. Featuring organic products in prominent public events like government dinners, Olympic games, World Exhibitions, UN events, etc., can also be powerful messages to the public in favor of organic products.

# **Country** examples

In **Turkey**, the Ministry of Agriculture undertakes organic awareness raising campaigns. Moreover, under the 2004 law for organic agriculture, state television must broadcast half an hour of educational and/or promotional programs on the organic sector every month.

In **Tunisia**, the government decided in 2010 to create an Organic Tunisian Product Week that would take place every year. This organic week includes various conferences and events for the sector but also reaches out to consumers and pupils in the various districts, including via radio programs. It is managed by the Ministry of Agriculture.

In **Saudi Arabia**, the Ministry of Environment, Water and Agriculture (MEWA) financed and co-organized two national public awareness campaigns for organic agriculture for a total budget of around EUR 400,000 (see best practice example text box below).

In **Brazil**, the Ministry of Agriculture, in partnership with other ministries and with NGOs, has been financing and organizing Organic Food Week campaigns every year since 2005, which involves promotion activities in nearly every state of the country.

#### Best practice example

Best Practice example: National Organic Consumer awareness campaigns funded by the Ministry of Agriculture in Saudi Arabia<sup>66</sup>

#### **Background**

Saudi Arabia depends on imports to meet 70% of its food requirements, and its organic production sector is at an early stage of development. For nearly a decade, the Ministry of Environment, Water and Agriculture has been working with the technical assistance of GIZ International Services (an independent operational department of the federally owned Deutsche Gesellschaft für Internationale Zusammenarbeit) and in cooperation with the Saudi Organic Farming Association (SOFA) to support the development of organic agriculture in Saudi Arabia. This was done under the framework of the Organic Farming Project financed by the Ministry and implemented together with GIZ International Services. In 2008, the Department of Organic Agriculture (DOA) was established in the MEWA, which was then called Ministry of Agriculture (MoA). In 2009 the first version of an organic regulation was adopted. In January 2011, the Saudi National Organic Logo was launched. The Ministry acknowledges the important role of organic consumption as a driver of growth for its emerging sector and a way to contribute to an innovative and modern production of high quality and healthy food. Since 2011, it has engaged in promoting the National Logo and organic products primarily through financing awareness campaigns implemented by GIZ International Services. The campaigns' key objectives have been to raise awareness for "organic", to inform Saudi consumers about the benefits of organic food and agriculture, and to establish the Saudi Organic Logo as a trustworthy brand.

# **First Promotion Campaign**

The launch of the National Organic Logo included an eight week consumer awareness campaign at a cost of nearly €100,000. A qualitative consumer survey conducted by interviews in shopping malls preceded the campaign, in order to inform the campaign design. The National Logo combined with a key message, "The health of your family depends on a healthy diet," was the centerpiece of 180 posters placed in public spaces, high traffic streets in the capital city Riyadh and on digital billboards in shopping malls. Media outreach, especially to print media, led to additional dispersal of this messaging.

#### **Second Promotion Campaign**

Based on lessons learned from the first campaign, the Organic Farming Project organized another 4-week campaign in 2014 with a budget of around €300,000. The approach to the survey changed from information collection in public places to the Internet (online survey advertised in social media), and was supplemented by cooperation with a fitness studio chain and a catering business. The survey reached more than 3000 responses. Objectives of this campaign were to: 1) create a linkage between "high quality", "healthy" and "organic" 2) promote organic foods as high quality products and 3) support domestic organic foods. A marketing agency was tasked with the creative design and implementation of the campaign. The core messages were: "Go Organic, Go Natural", "Organic…your natural choice to enjoy the benefits of pesticide-free foods!" and "There is no alternative to the original", all associated with the national logo.

The campaign consisted of:

<sup>&</sup>lt;sup>66</sup> Information provided by the Department of Organic Agriculture (DOA) / Saudi Ministry of Environment, Water and Agriculture and Organic Farming Project, Saudi Arabia / GIZ International Services.

- A press conference with the Minister of Agriculture and prominent business representatives from the private sector (CEO of Danube and CEO of Tamimi Markets) at the launch of the campaign to attract media attention;
- Four weeks of information in social media (Facebook, Instagram and Twitter) on the benefits of organic, in conjunction with two weeks of campaign banners on several frequently visited Saudi webpages including Google and Yahoo;
- Four weeks of "organic food festivals" in two of the biggest Saudi supermarket chains (Danube and Tamimi Markets), which partnered with the campaign to prominently display and heavily promote organic products in 20 stores located in all major cities of the country;
- Displays of the campaign's key messages on digital billboards inside major shopping malls over the four-week period.

The social media campaign was very successful (16,000 followers and 39,000 Likes) and encouraged many consumers to get actively involved. Combined with organic festivals that enabled sensitized consumers to actually find the products in their normal supermarkets, it has significantly increased the organic consumer base in Saudi Arabia and motivated supermarkets to increase their organic products range (including many imported products). Parallel to consumer awareness campaigns, the Organic Farming Project has been working on the front of organic product and market development, in order to ensure that local organic products meet consumers' (increasing) expectations in terms of quality, packaging, etc.

## Pitfalls and challenges

The main risk when embarking on a consumer awareness raising campaign activity is spending a lot of resources and then still missing the target. Especially if government agencies implement such activities without consulting or cooperating with the private organic sector, there is a high risk that the efforts will not lead to the highest possible impact.

In countries with a very young organic sector, and generally speaking a low income per capita, it would be a waste of resources to do a mass campaign targeting the general public when organic products are not easily available and most people cannot afford to pay a premium. Instead, consumer campaigns should be more targeted to the potential "LOHAS" (Lifestyle of Health and Sustainability) profiles of consumers, such as those going to health clubs, dieting, doing yoga, etc., and young mothers with sufficient purchasing power.

The consumer information campaign should direct consumers to where they can find organic products. It should preferably be coordinated with push measures to ensure that there will be enough and well organized organic products to meet the newly created demand.

The core messages of the campaigns also need to be well thought through and adapted to the audience. In developing countries with emerging organic sectors, the topics such as animal welfare, biodiversity, or soil conservation, are unlikely to be driving a lot of

new consumers to organic. Instead, the topics of health (avoiding pesticide residues, particularly), and the image of a "natural" product, are more likely to be effective. In well-developed organic markets and countries with generally high consumer purchasing power, the messages and the target groups of the campaigns will be different.

It is a difficult exercise to make a consumer campaign that has the expected impact. Therefore, efforts should be invested in monitoring and evaluation of consumer campaign activities. A good practice is to collect and publish sales figures regularly (ideally annually). Such data can also be used as content for annual media conferences to present new statistics and consumer trends and show case developments, which is also a form of promoting the sector, both to potential investors and to the general public.

# b. Public procurement

# Political justification

Organizing for the provision of organic food in school meals, government canteens and other public canteens can also be a way to contribute to awareness raising and to the growth of the organic sector by developing another type of demand for organic products.

It provides access to organic food to a broad public, including children from poorer households, and those who would otherwise be unlikely to fall in the consumer group for organic products. Schools embarking on efforts to source organic products are also more active to promote healthy eating among the pupils in general.

#### Suitable contexts

Public procurement is feasible at various stages of development of organic agriculture and whether the country is a net-exporter or net importer of organic food. However, at very early stages of development, it won't be feasible to pass (or implement) regional or national policies regarding organic public procurement, as not enough organic products are available. It may be feasible on a very small scale, e.g. municipality school level and limited number of food items. If the country is essentially an importing country for organic products, public procurement as a major area of policy intervention is possible, but may be more difficult to get political support for, since it will not easily be linked to territorial development.

Actions for organic public procurement can take place regardless of the organic regulatory context, as individual canteens can set-up their own criteria for identifying credible organic products, but it will be easier in a regulated context or a context with an officially referenced organic guarantee system.

Organic public procurement is feasible and appropriate under any culture of government intervention on the agricultural sector, but is more strongly rationalized where there is a culture of government intervention in agriculture markets.

Public procurement does not serve all objectives for policy support to organic. It matches well with the objectives of encouraging the production of positive externalities (social and environmental benefits), and wanting to increase access to healthy food for all citizens. It doesn't serve the purposes of wanting to build the organic sector as a foreign currency-earning sector, nor the objective of wanting to increase domestic self-sufficiency in the organic sector.

#### Possible modalities of implementation

The decision to source more organic products in public canteens can happen at various levels ranging from the individual canteen (school level, or hospital level) to municipality, region and up to a national government policy. Such decisions usually start with kindergartens and school meal services (because children are the most vulnerable group when it comes to pesticide residues in food).

Efforts are also necessary on the level of organizing producers in local supply chains to be able to respond collectively to the demand for particular products needed by the canteens and to organize storage, processing and deliveries. Sometimes this even involves setting-up projects to encourage conversion to organic, in order to anticipate the increase in demand when canteens shift to organic products.

It is recommended to adopt an incremental approach to increasing the proportion of organic products in the menu each year (starting with the easiest products), in order to give time for the suppliers to adapt and plan their production. A preliminary analysis of the organic products available in the locality, including their seasonality and available quantities, can assist in planning the menus and the tender.

It is easier to have some organic items offered every day (even if it is only a few products) rather than have meals that are fully organic once in a while.

Budget increase is the main concern, when shifting to organic procurement. Municipalities and individual schools are implementing a range of mitigation strategies including changing towards lower cost ingredients, reducing waste, optimizing the cooking process to save energy, which bring further environmental benefits at the same time.

# **Country examples**

In Latin America, **Brazil** is the leader in terms of organic purchases in public procurement.

In **Bhutan**, the government doesn't have a specific organic public procurement program but has programs where farmer groups (some of which are organic) are linked to school feeding programs and supply school canteens.

#### Best practice example

## Best Practice Example : Organic Public Procurement in Brazil

Brazil is at the forefront of sustainable food public procurement policies in Latin America. Policy initiatives exist at various levels, including the national level, the state level, and the municipality level.

At the national level, the Food Acquisition Program (PAA), launched in 2003, supported the purchase of diverse, locally produced food from family agriculture and preferably from sustainable systems, which helped small organic farmers gain market access for their products. In 2009, the National School Feeding Program (PNAE) set an objective to purchase at least 30% of the products for school meals from local family farmers, prioritizing organic foods. It also required that organic products be purchased from farmers at a 30% price premium. The program feeds 47 million students each day in Brazilian public schools.

In 10 years, more than 3 million tons of food from over 200,000 family farmers has been purchased. The annual budget was around EUR 1.6 billion in 2013. These programs have not only provided strong incentives for conversion to organic, but also provided universal access of organic food which was beforehand only affordable for an elite population, and income generation for smallholder farmers.

At the state level, a leading example is the State of Parana that, in its law 16751 of 2010 has also set a target of 100% organic school meals served daily to its 1,3 million pupils (the current value is 25%).

At the municipality level, there are also impressive commitments. A few municipalities and states in Brazil have passed laws that set targets beyond what the national Brazilian School Feeding Program requires. A leading example is the city of Sao Paolo, whose school meal program is one of the biggest in the world. In 2016, the city passed a decree setting a target that by 2026, 100% of the two million school meals offered in the city every day should be organic. This decree No 56913 of April 2016 contains a detailed plan of how this target is to be progressively achieved over the next 10 years.

## Pitfalls and challenges

Availability of organic products is a main challenge, which is why it is interesting to combine this approach with measures to support the supply of products demanded by the canteens.

On average, going organic may potentially increase the cost of canteen ingredients. However, the cost of ingredients represents on average only around 25% of the total cost of a meal in public catering in developed economies. Moreover, several characteristics of organic products lead to savings: in particular, certain fruits and vegetables do not need to be peeled; cereals and meat are more nutritive than their

conventional counterparts<sup>67</sup> and therefore portions can be reduced; rebalancing of meals with more vegetal proteins and less animal proteins can also reduce the cost.

# c. Support to domestic trade/ retail uptake

# Political justification

Availability of organic products in market channels that are frequently used by consumers (whether they be street markets or supermarkets) is a major precondition to consumers buying them. Offer creates demand, at the level of retail. Sometimes the best way to boost organic consumption is simply to increase the number of organic products placed on supermarket shelves. We have seen that the decision of one supermarket chain to offer (more) organic products can have a bigger impact on boosting demand than any consumer awareness campaign. This is particularly true when mainstream supermarkets or regular street markets begin offering organic products: they reach consumers who would not have otherwise gone the extra miles to buy products in a specialized organic shop. But even increasing the number of specialized organic shops, or farmers' markets is a very effective way to create demand: make organic products available to consumers in their neighborhood, where they normally shop.

Although this aspect touches very much private business interests and is therefore not often considered as a possible policy intervention, creating organic market channels and encouraging the uptake of organic through existing mainstream food market channels can be a very cost-effective high-impact way of boosting organic demand with long-lasting impact. It is also a strategic complement to other demand-creating policies such as consumer awareness raising campaigns: consumers may respond positively to the organic message, but if they do not find organic products in the shelves it will not translate into purchasing action.

In emerging organic markets, the creation of specialized organic shops is often the first step to encourage the creation of a regular organic consumer base. Such pioneer shops are often created by NGOs, but can also be supported by public authorities as part of the measures to support the development of the domestic organic market.

Despite the importance of supporting the uptake of organic products in supermarket chains and other types of stores, one should not underestimate the value of setting up and maintaining more direct sales systems, and in particular organic farmers' markets. These types of market channels are very compatible with the ideals of the organic movement in terms of food miles reduction, shortening of the supply chain, and sustaining small and diversified farms. Also, farmers markets serve a great educational role in terms of educating consumers about organic farming.

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<sup>&</sup>lt;sup>67</sup> See for example Lairon, D. 2010, *Nutritional quality and safety of organic food. A review*; AFSSA, 2003, *Report on Evaluation of the nutritional and sanitary quality of organic foods*; and S. Kamihiro et al, 2015, *Meat quality and health implications of organic and conventional beef production*.

#### Suitable contexts

Support to organic trade and retail uptake, such as the creation of organic farmers' markets and organic shops, and the uptake of organic agriculture in general retail chains, can be implemented at all stages of development of the organic sector, of course, at very different scales and with different targets. It will be easier if the country has an officially referenced organic guarantee system or an organic regulation that provides a clear-cut definition of what can be sold as organic, and for large-scale supermarket penetration this is likely a must.

This type of support is less likely to be adopted in contexts with a culture of low interventionism in the agricultural sector, although some measures at the local (municipal) level may still be well suited.

This type of measure is focused on creating domestic demand and is therefore not relevant to the policy objectives of earning foreign currency through the organic sector or of increasing self-sufficiency in organic. For other policy objectives such as the encouraging societal benefits and increasing access to healthy food, this measure is a very relevant pull measure.

#### *Possible modalities of implementation*

Facilitating the uptake of organic products in the various domestic market channels can be done in as many ways as there are differing market channels.

Government, local governments or municipalities can support weekly organic farmers markets. This is typically done through the provision of a free location and sometimes infrastructure such as stands, electricity and water for the market. Additionally, the government or municipality can host the market management within its offices, and even pay the salaries of the staff that organize and coordinate the market. Apart from providing the location, public support is particularly relevant for farmers' markets when it comes to dealing with start-up costs, publicity, promotion, information exchange, market charter issues and, in case there are several markets in the same locality, coordination of dates. Moreover, farmers' markets may face a number of hurdles with general regulations such as health and safety or licensing. Hence, it can be useful to designate a person in charge of supporting farmers' markets to overcome these hurdles.

Another version is the support of an annual organic fair, which may have less impact in terms of volumes consumed, but is interesting to raise the profile of organic and for consumers to try new organic products. Again, government can administer or finance the organization of the fair and provide the space (or even the complete booth) free of charge, or subsidized for producers to display their products.

In emerging markets another format is supporting the creation of small organic shops. Especially in a country/region where no organic shop exists, this can be a way to kick-start a domestic market by offering a regular place where consumers can find basic organic products. Especially at the beginning, the organic shop will likely be a fragile

business and can therefore benefit from public support in the form of free space, or even government-run shops (as in the case of the Organic Trading Posts in The Philippines). Sooner or later however, organic retail will (and should) develop as a profit-oriented business and it will no longer be necessary for government and public institutions to get involved in running or supporting organic shops.

The government may also support uptake of organic products in supermarkets, like in Saudi Arabia, or in hotels and restaurants, like in Tunisia and Costa Rica.

# Country examples

In **Saudi Arabia**, in 2013-2014, the Ministry of Environment, Water and Agriculture, through its Organic Farming Project, implemented an Organic Marketing Program in conjunction with its consumer campaign activities. Due to this program two of Saudi Arabia's major supermarket chains were convinced to massively promote organic products in their stores in a concerted manner. See Best Practice text-box below for more details.

The Council of Agriculture of Taiwan, in **China**, provided subsidies to the farmer association for setting up and participation in farmers markets.

The Philippines' government has been supporting the establishment of 49 "Organic Trading posts" across the country. These trading posts fulfill the double role of input shops (selling exclusively input for organic farming) and organic shops (selling organic products to consumers or intermediary buyers. The concept was decided by the Department of Agriculture in 2012, and applications were submitted by local government units in 2013. For more details, see the best practice text box below.

In **Nepal,** the government's Agribusiness Promotion and Marketing Development Directorate organizes an annual national organic fair. The fair, which shifts locations, is now in its 9<sup>th</sup> year and gathers around 200 farmers. The government's investments in the fair have incrementally increased and were around EUR 17,000 in 2015.

In **Tunisia**, the organic development plan maps out action points to create local organic marketing channels in supermarkets, hotels and tourist routes. The Technical Center for Organic Agriculture financed by the government organized an initiative to collect organic fruits and vegetables from producers, package them, and deliver them to some supermarkets in Sousse and Tunis. The Ministry of Agriculture then expanded it to other supermarkets in Tunis and to luxury hotels, with a focus on olive oil. The goal is to encourage the structuring of a domestic supply chain, as currently, French supermarket chains dominate the domestic organic market in the country, but mostly with imported products. The government also organizes regular organic markets and fairs in the country.

In **Argentina**, the city of Buenos Aires sponsored the national organic association for the organization of the Ferias Orgánicas Barriales (neighborhood organic fairs). This

was one of the most significant public actions in support of domestic organic development in the country.

The federal government of **Mexico** supports the organization of the annual national organic trade fair, EXPORGÁNICOS, in Mexico City. In 2016, 100 producer groups were supported to participate and have been offered a booth free of charge to display their products to potential buyers.

In many regions of **Peru**, the local authorities support organic markets, for example, making available a public space for the markets, as well as by appointing a market coordinator and supplying electricity connections, security and publicity. In the district of La Molina in Lima the organic market installed a permanent roof, paid by the producers, but for which the municipality waived the fees normally charged for such construction.

In **Bolivia**, support was given to local organic markets in the context of a government - UN cooperation program from 2009 to 2013 aiming to integrate indigenous Andean producers into new national and international value chains. Support was given to local marketing spaces such as farmers' markets, including the Raymi organic farmer's market in Sipe Sipe municipality (Cochabamba), Bio Tarija and Bio Achocalla.

In **Costa Rica**, the National Program on Organic Agriculture, run by the Ministry of Agriculture, established in 2005 a Saturday market on the premises of the National Center for Supply and Distribution of Food. Currently, the Ministry of Agriculture cooperates with the organic producer associations to develop a phone app aiming to facilitate the connections between the sellers and buyers of organic products on the domestic market.

In **Laos**, the Ministry of Agriculture provides support to an organic market in the capital city, Vientiane. The market has seen significant growth since its creation in 2006, going from a monthly market to a daily market. District and provincial offices of the Ministry of Agriculture also organize several organic markets across the country, in cooperation with NGOs. For example, the Xieng Khouang organic market is organized by the Peak District Agriculture and Forestry Office with financial support and technical support from a local NGO, while the weekend organic market in Luang Prabang is managed by the Provincial Agriculture and Forestry Extension Service and the Provincial Department of Agriculture and Forestry with financial support from the Swiss Development Cooperation (SDC).

In **India**, the Ministry of Agriculture opened, in 2016, a government-run organic shop selling only PGS-certified products from the country, in its office in New Delhi. Also more and more state governments are opening organic shops to promote their organic products, or allotting a specific shelf area in general stores for organic products. For example, the Sikkim government has opened the Sikkim Organics store in Delhi and a few organic stores across Sikkim.

In **Taiwan**, the Organic Center at the I-Lan University developed the Taiwan Organic Information Portal, with funding from the Council of Agriculture. It contains an organic e-commerce system. The portal contains tools for consumers to find organic farms in their neighborhood or to buy organic products online. Organic farmers can create their own e-shop under this portal, but there is also a general e-market for those who do not want to create their own e-shop. The system is linked to QR codes, which allows consumers to track organic products through their smart phone. The government subsidizes each farm with EUR 93 to encourage farmers to put the QR code on their products.

In **Turkey**, the first organic farmers market in Izmir was established through a project funded by the İzmir Development Agency Financial Support Program for Social Development between 2009 and 2010.

# Best practice examples

Best Practice example 1: Incentivizing the uptake of organic products in Saudi Arabia's supermarkets<sup>68</sup>

# **Background**

For nearly a decade, the Ministry of Environment, Water and Agriculture (MEWA) has been working with the technical assistance of GIZ International Services (an independent operational department of the federally owned Deutsche Gesellschaft für Internationale Zusammenarbeit) and in cooperation with the Saudi Organic Farming Association (SOFA) to support the development of organic agriculture in Saudi Arabia. This was done under the framework of the Organic Farming Project financed by the Ministry and implemented together with GIZ International Services. In 2008, the Department of Organic Agriculture (DOA) was established in the MEWA, which was then called Ministry of Agriculture (MoA). In 2009, the first version of an organic regulation was adopted. Since 2011, the Ministry has been promoting organic agriculture to consumers through the Organic Farming Project.

#### Action to promote the uptake of organic products in supermarkets

As part of the Organic Farming Project, "organic food festivals" were organized in partnership with two of the biggest supermarket chains in the country. In 2013 the project started to work on a "Marketing Development Program". One part of this program was the implementation of so-called "Regional Marketing Working Groups". These groups gathered private stakeholders who were active in the organic sector in different regions of the country, with the aim to explore marketing possibilities for organic products. The work of the Jeddah based group resulted in a lively exchange of marketing ideas with the CEO of Danube (one of the largest Saudi supermarket chains). In 2014 a meeting was held between the Organic Farming Project and the CEO, presenting potential cooperation ideas between Danube and the project and this process was successful. A partnership was implemented as a win-win agreement whereby the supermarket was associated to the public awareness campaign in the general media, which was fully financed by the Ministry and the supermarket agreed to extend its existing range of organic products during the four weeks of the campaign, displaying the organic products

<sup>&</sup>lt;sup>68</sup> Information provided by the Department of Organic Agriculture (DOA) / Saudi Ministry of Environment, Water and Agriculture and Organic Farming Project, Saudi Arabia / GIZ International Services.

prominently and even suspending the entry- and shelf-fees for the domestic organic producers. This enabled small-scale farmers to present their organic products for the period of the campaign to a large number of customers. In this way the supermarket also contributed financially, indirectly, to the campaign (by forgoing the fees). In the course of the preparation of the campaign, a second major Saudi supermarket chain, Tamimi Markets, became the second key-partner of this public awareness campaign. In total, 20 stores (belonging to these two chains) across the country participated in this action.

This action managed to increase the range of organic products offered in Saudi supermarkets. The two supermarkets involved continued to offer organic products after the end of the four-week campaign and increased their product range, especially the choice of imported processed products. Moreover, two other major supermarket chains have joined the trend of offering organic products, which means that the availability of organic products in the country has increased considerably in the past two years.

# Best Practice example 2: Setting-up organic trading posts in every province in the Philippines

### **Policy Background**

In 2010, the Philippines passed a law on Promoting and Developing Organic Agriculture: the Republic Act 10068. Section 19 of this Act mandates the Local Chief Executives to establish at least one trading post for organic inputs (in the 2010 law, the centers were envisioned only as input trading centers) for every Local Government Unit in their area of jurisdiction; The rule accompanying this article specifies that "the Local Government Units (LGUs), on their own, shall establish such trading post".

In parallel, Section 5 of the same act establishes a National Organic Agriculture Program (NOAP) and mandates the Departments of Agriculture and Trade and Industry to develop and institutionalize the promotion of local and international trade fairs, market promotion and matching activities with the active participation of Local Government Units, NGOs, and other organic stakeholder networks to push organic consumption (also on a domestic level). Rule 18.4 of the same Act also mandates that "The Local Government Units shall establish dedicated stalls in the public markets and organize a special market day for organic products".

In 2012, the Department of Agriculture issued a memorandum circular on the guidelines for the establishment of organic trading posts, in which the concept was explained as serving the two purposes of a market place for organic inputs and for organic products. The circular explained that the objectives of the Organic Trading Posts was to: - Ensure availability and accessibility of certified or registered organic inputs and organic food for farmers, producers, manufacturers and stakeholders interested in adopting organic agricultural practices;

- Promote and showcase farmers organic produce such as organic inputs and products in strategic areas;
- Provide an outlet for selling organic food and products.

The eligibility criteria for the approval of such Organic Trading Posts included targeted location (i.e. strategic sites where organic farming is more advanced and where demonstration farms have been established), local government's willingness to provide counterparts for the project, the pre-existence of Local Technical Committees on Organic Agriculture and of a local ordinance in support of the Organic Agriculture

Program. The circular also specified the types of products allowed to be traded in these trading posts, but the approach was very inclusive: they allowed third party certified organic products, but also first party and second party verified and/or PGS products. Nearly all Local Government

Units complied with this instruction and submitted proposals to the Department of Agriculture. In 2013, proposals from 75 Local Governments Units (LGU) for setting up organic trading posts were approved by the DA with counterparts from the LGU.

#### **Implementation**

The Department of Agriculture allocated around EUR 30,000 per Trading Post for the building, equipment and working capital and local governments were required to provide land as counterpart and expenses for operations and maintenance. The DA got the Organic Producers Trade Association (OPTA Philippines) to provide training to the Management Team on Good Organic Retailing Practices, Organic Enterprise Management, Guarantee System, Finance & Marketing. The local governments constructed the building, purchased equipment, hired personnel and operated the organic trading posts.

By mid 2016, a total of 40 Organic Trading Posts were completed and 32 were still under development. Three approved trading posts were non-operational or had stopped operations (failed projects). Most stores are open daily and some stores open a farmers' market day once a week. Producers supply the products but also participate to some extent in the management of the Organic Trading Posts. In addition to organic inputs, the organic food products sold in these trading centers are rice, vegetables, some coffee, some herbs & spices, and some livestock and poultry. They are mostly non-certified organic products and are mostly sold at average prices, but some products are sold at a premium. The sales turnover of the trading posts varies greatly depending on the region but is usually below EUR 30,000 annual sales. Consumers buying from the trading posts are mostly employees from local governments, schools and businesses, hospitals and subdivisions.

The challenges are the classical challenges of starting an organic shop in an emerging organic sector: they include the low volumes of products currently available in the stores (not enough organic produce suppliers), the seasonality of the products and the lack of variety to encourage consumers to visit the stores, the difficulty to make consumers aware of the existence of the trading posts in their area, and the benefits of consuming organic products (that may be perceived as lower quality). Product packaging also would need to be improved

Additionally there are challenges specific to the government-operated nature of these trading posts, such as problems on fund liquidation of LGUs, resulting in the delay of the completion of the trading centers. As these centers are operated by LGUs, the purchase of goods also needs to undergo a government procurement procedure or other accounting rules, which is cumbersome. Generally speaking, there are still improvements needed to manage the trading posts as successful organic enterprises.

# Pitfalls and challenges

The challenges in promoting the uptake of organic products in markets, shops and supermarkets are commonly associated with the difficulty of ensuring a reliable supply chain in the context of a niche sector. Organic products are often available in small volumes, with high seasonality of the products, limited number of suppliers, and often sub-standard packaging or visual appearance of the products, as compared to mainstream conventional products. Shops, markets and supermarkets alike have to deal with those issues, and it is best if the public support is designed to provide solutions to those problems. Adding to that is the fact that when markets or shops are run by

government or municipality staff, these people might lack business sense and this results in a poorly run shop or market that will continuously depend on public financing to break even. In this respect, it may be better for the government to partner with the private sector in the management of the organic markets/shops.

Experience also shows that promoting the uptake of organic products directly into supermarkets can be a tempting short cut to give a big push to an emerging organic sector but can be a complete failure if domestic organic production capacity is not ensured first. This was the case for example in South Africa where, a few years ago, the Department of Trade and Industry (DTI) launched a retail incentive in the form of a matching grant - giving every participating retail chain about EUR 80,000 to do a special promotion for organic selected stores. Although this sounded like a good "pull" measure, it ended in a failure because the farmers could not supply good quality certified organic products in sufficient quantities to satisfy the retailers' supply chain requirements. This action was taken against the advice of the local organic sector, which pleaded to put more emphasis on supporting producers in conversion and certification, and, overall, did more bad than good. After this failure, retailers became more negative about organic products than before. Planning, time and various efforts are needed to convert the number of organic producers needed to afford a consistent supply to supermarkets. Unless there is an over-supply situation, or imports can easily be obtained (that was the case in Saudi Arabia, for example, as their import rules for organic products are more enabling), the best strategy is to combine this measure with push (production support) measures in a well-integrated and reasonable step-by-step approach. An example of such dual effort (at the private level) was when the Coop supermarket in Switzerland decided, in the end of the 90s, to increase its range of organic products, it accompanied this decision with a massive investment in campaigns addressed to farmers for promoting conversion to organic agriculture.

#### d. National/common logo for organic products

#### Political justification

Having a common logo for organic products sold in a particular market has proven to be a decisive element in fostering consumer recognition of and trust in organic products and is therefore a very efficient tool for promotion and market development. In a market where multiple organic logos (including those of certifiers and organic brands) are used alternatively on various products, consumers can easily get confused and not know which logo to trust. Although private logos should still be allowed (and can convey different messages), ideally there should be one common organic logo that is prominently placed on ALL the products sold as organic in a country: this is a demonstrated decisive factor to build consumer recognition.

Depending on the structure of the market and the organic guarantee system, which may be organized at the national or supra-national level, the common organic logo may be a national organic logo (e.g. Brazil, China, USA...) or a regional community logo (e.g. East Africa, Pacific Community, EU...).

Normally the logo is primarily aimed at fostering domestic market development. However, in some cases governments have used it also as a brand, in an attempt to promote a country's organic exports (e.g. BioTunisia, BioBhutan). In any case, since the development and promotion of the logo are serving the collective interest of organic operators (and consumers), it is important that they are not controlled by restricted private interests. A common organic logo is, in this sense, a "public good". This is why it makes sense for the public sector (government or community of countries) to provide support to its development and continued promotion.

# Suitable contexts

Supporting the development of a common logo for organic products is a measure that is suitable to any stage of development of the organic sector. Overall it is easier to introduce a national logo in an earlier stage: at a later stage, as various organizations will have invested considerable time and resources in promoting their own logos, and it is hard for them to drop them. Also, it is more difficult to "train" consumer to recognize a new logo if there are already some prominent logos that consumers have learned to identify as the signs of organic.

It is however not suited to the context where there is no agreed upon organic guarantee system. If the government is to endorse and support a common logo, it should in parallel (if not already in place) endorse a common organic guarantee system that backs-up the logo with clear technical requirements (which standards and which control systems are considered valid in order to obtain the logo).

The development of a common (regional or national) organic logo can be relevant to all the policy rationales to develop organic, whether they be to encourage the production of societal benefits, access to healthy food, increasing self-sufficiency or earning foreign currencies. If the objective is to promote self-sufficiency, the logo may have a slightly different version for domestically produced organic products, in order to promote them better, as compared to imports. If the goal is to earn foreign currencies through export, a national logo is not essential but it may, in some cases, become a marketing advantage if the country has or can create a positive image of itself compatible with the organic image (e.g. a country with a lot of unpolluted nature or smallholders and ancient traditions).

#### Possible modalities of implementation

The common organic logo may not need to be necessarily linked to an organic regulation, but it should be accompanied by a certain set of criteria for which organic products are allowed to bear the logo. This means having an "official" organic guarantee system, harmonized at the national or regional level. All of that may be managed by the government with or without having a compulsory organic regulation.

This guarantee system may even be managed by the private sector, rather than by the government, but it can still be somewhat endorsed/recognized by the government as THE common system for the country/region. An example of this is the East African

Community (**Kenya**, **Uganda**, **Tanzania**, **Burundi and Rwanda**) in which the East African Organic Product Standard is approved by the East African Community (an intergovernmental body) and is linked to the regional East African Organic Mark, but the mark is managed by a consortium of the national organic umbrella organizations. This consortium also decides on the East African Organic Guarantee System, i.e. the criteria for granting the use of the logo. Governments can adopt similar models whereby they delegate the management of the common organic logo to the private sector umbrella organization (in cases where this organization has full legitimacy) but they can support it either financially (especially at the stage of logo development and launch, but also later on for regular promotion of the logo) or by referencing the system in their official governmental policies.

The common organic logo can be made freely available for any operator who complies with certain conditions (is certified etc.) without a further licensing process. This is the case for the EU logo. In other cases, the common logo is licensed to operators who need to undergo a separate licensing/registration process, which may or may not include fees to be paid and various administrative requirements such as approval of artwork. For a government it can be sufficient to put the rules for use in a regulation. In the case where the common logo is managed by private bodies (like in East Africa), and not backed-up by mandatory government regulation, a licensing process might be necessary for legal reasons.

More advice on this topic can be found in the "Template Manual for the management of a national organic logo" under the Organic Regulation Toolkit published by IFOAM-Organics International and available at <a href="http://www.ifoam.bio/en/organic-policy-guarantee/organic-regulation-toolkit">http://www.ifoam.bio/en/organic-policy-guarantee/organic-regulation-toolkit</a> under the section "Emerging organic sector".

#### Country examples

Most countries that have a mandatory organic regulation also have developed an official organic logo. The logo development is then taken care of by the government and the government has the ownership of the logo. This is the case in regulated countries such as the **US, Japan, Tunisia, China, and Brazil**. For the **EU**, the logo is a regional logo (the leaf logo) that was developed in a process managed by the EU Commission. Some governments do some promotion activities (promoting the logo towards consumers) but many times the high-impact promotion is rather left to the private sector to do while the government limits itself to a few webpages that explain the meaning behind the logo to the general interested public (e.g. in the US or EU).

Developing a common organic logo is however not necessarily linked to a mandatory organic regulation. It is sufficient that the country (or group of countries) has an official organic guarantee system with clear criteria on which products (certified to which standard and under which control system) can be allowed to use the common organic logo (while other general "organic" claims may still be unregulated). There are a few examples of countries or group of countries that have adopted a common organic logo without a mandatory organic regulation. Examples include Bhutan and India. In **Bhutan** 

the National Organic Program managed by the government has developed and launched the "Bhutan Organic" logo, to go with an innovative type of local organic assurance system. **India** has had an organic regulation since 2000 and an accompanying government-managed India organic logo since 2002. However, up to 2016, the regulation remained voluntary for the domestic sector. Organic operators could choose to use the India Organic Logo for the domestic market or not (the organic claim per se was not regulated), but if they did, they would have to comply with the regulation.

# Pitfalls and challenges

One of the main challenges when embarking on the development of a common organic logo is to identify the best territorial level at which it should be developed. Sometimes, several options exist: for example, the country can develop a national organic logo, or cooperate with neighboring countries to develop a regional organic logo. The development of the logo in itself is not a big investment, but it can take years and substantial efforts to promote uptake of the logo on products (unless it is compulsory) and to create an understanding and trust among consumers of what the logo means. If these efforts are made at the wrong level e.g. a national organic logo, which will then be overtaken by a regional organic logo within a few years, resources will be lost and consumers will be confused. Likewise, if there is an existing regional organic logo used and promoted by a community of countries, it is counterproductive for one of the countries to embark on developing and promoting its own national organic logo. The appropriate territorial scope of the logo depends very much on the territorial scope of the organic guarantee system. Usually, when a group of countries have agreed on one common standard and one unified organic control system, there should be a single organic logo corresponding to these. However, if regional harmonization happens after the countries already have well-established national organic logos in place with high consumer recognition, abruptly abandoning the national logos will be harmful to the sector, and a multi-year transition period with use of both the national and regional logos will be necessary (as in the EU case). In Denmark and Sweden, the national logos still have much higher market recognition than the EU logo.

Some countries had the idea that their organic logo should be used as a tool for export marketing. There are however to date no examples of that being successful on a significant scale. One reason is that most exported products, especially from commodity exporting nations, are re-packaged in the importing countries or are ingredients in processed products in the importing country. Another reason is that the communication of several foreign organic logos is undermining the communication of the national logo, which means that most actors (e.g. supermarkets) will not gladly participate in such promotion.

Extra costs or complicated procedures to get access to the logo will impede its uptake, and therefore its use and recognition. This is also the case for how the logo is used for imports. If there are limitations for its use on legitimate imported organic products, there is a risk that a substantial proportion of the organic products in the market will not carry the logo, which undermines its general recognition and value. It is therefore important that the requirements for access to the logo be low-cost and easy, including

for imported products that are produced according to other standards recognized as equivalent.

#### e. School Organic Gardening and Curricula

#### **Political justification**

"As environmental concerns broaden and diet-related health and nutrition problems increase, governments and development partners are increasingly interested in the potential of school gardens" FAO observes<sup>69</sup>. School organic gardens and curricula have strong potential to teach fundamental lessons about biology, ecology, food and nutrition.

School gardens and curricula can also start the developmental pathway for acquisition of vocational skills in agriculture: in countries which are mainly agrarian, school gardens can play a direct role in training future growers and farmers.

Last but not least, they also have the potential to shape the values and expectations of children and their families about organic agriculture systems and food supplies. It can help increase awareness and demand for organic products. Government support at all levels from national to local to school organic gardening and education initiatives is among the effective options to support development of the organic sector in the country and help to create many related public goods.

#### Suitable contexts

Supporting the inclusion of organic gardening and organic curricula in schools can be implemented in all contexts.

#### Possible modalities of implementation

Governments can and should take the lead in providing appropriate political signals and resources for developing school organic gardens and curricula. At some point the implementation will have to be at local level, but governments may identify ways to help schools and local leaders to help themselves in their endeavors. The FAO observes that "Some well-documented success stories suggest that the most sustainable programs often grow organically: they start small, take little for granted and expect slow progress; they allow schools to opt in and later to 'graduate' and help others; they offer small incentives and long-term coordination. All of these factors should be taken into account when deciding the best way forward and how far the process of setting up, reviving or re-orienting school gardens should be divided between top-down facilitation and bottom-up initiative." Governments can provide resources including support for training (train-the-trainer programs), primary school materials such as

<sup>&</sup>lt;sup>69</sup> A New Deal for School Gardens, FAO, 2010.

culturally and geographically appropriate lesson plans and activities linked to mainstream multidisciplinary curricula. There are many good resources worldwide that could be purchased or freely acquired and adapted.

FAO notes that, "At the policy level, this multidisciplinarity needs to be reflected in some intersectoral commitment. Government initiatives tend to be housed in the Education Ministry, with support from Agriculture. Health and nutrition services and environmental agencies should also be represented. NGOs and International Development Agency activities focusing on food production or horticulture also need to make sure that nutritional, educational and environmental aspects are not neglected. The balance needs to be redressed, especially in favor of nutrition, nutrition education and the environment. The multidisciplinary view also underlines the need to build capacity across the board. It is not only children and teachers who must learn: nutritionists and agriculturists need to learn about education; agriculturists need to learn about nutrition and nutritionists about agriculture; educators need to learn about both; everyone needs to learn about the teachers, the children and their families. Time must be allowed for this."

Approaches to implementation may be either top-down or bottom-up. National governments, possibly in cooperation with international developmental agencies and other NGOs, may develop model curriculum modules for various grade levels and educational topics, and make them available to both public and private schools nationwide. National and regional governments could co-sponsor teacher training programs. Local governments could support and facilitate the provision of resources, both human and financial for constructing and maintaining school gardens. Whatever the implementation model, organizers should build into the projects means for measuring outcomes. Governments at all levels should publicize the garden initiatives, not only at launch but through performance measurement and dissemination of program results.

At the level of the schools, school garden projects are structured differently depending on the municipalities/schools. In some municipalities they are a mandatory part of the school curriculum; in some it is a voluntary offer as a part of the teaching; and in other municipalities it is an afterschool activity. It is beneficial if the crops grown are also used in the school kitchen and even better if pupils will participate in the cooking as it will extend the learning from growing into preparing food.

More information is available on the <u>FAO website</u> and in several FAO guides for supporting and implementing school gardens and curricula: in particular, the FAO publication, <u>A New Deal For School Gardens</u>, outlines a 12 point program for how national governments can lead a top-down approach and offers an explanation of bottom-up approaches by local governments, schools and community. For the school level, good resources also exist, such as those on the <u>Schools Resources</u> page from GardenOrganic (UK), which contains practical advice and school activities for all ages on how to start and maintain an organic food garden.

# **Country** examples

**Costa Rica** has long-established policies of associating school gardens with school food and improving children's nutrition and eating habits. The Food and Nutrition department within the Ministry of Education runs a program entitled <u>"Programa"</u> Nacional del Huertas" which provides financial resources, capacity building and advice for schools to initiate their own garden projects, with a strong focus on environmental practices including organic gardening. For more information, see Best Practice textbox below.

In **Belize**, an NGO-led program assisting some 50 schools in developing organic school gardens is tied to the government school-feeding program. The Telefood Report 2005 described the scheme as "a working model worthy of replication".

The Ministry of Education of **Rwanda** implemented, in 2005-2006, the Rwandan school garden pilot project, funded by FAO with a grant of about EUR 300,000. Implemented in 20 schools, it aimed to make schoolchildren and their local communities aware of the importance of good nutrition, to develop their garden skills, and to supplement children's diets. The pupils and their parents at the pilot schools have identified environmental protection through organic gardening as one of the advantages of the gardens.

In **The Philippines**, the Organic Agriculture Act of 2010 mandates that "the National Government, through the Department of Education and in coordination with concerned government agencies, NGOs and private institutions, shall strengthen the integration of organic agriculture concerns in school curricula at all levels". As a result, many organic school gardens were implemented at primary school level.

In **Bhutan**, the Ministry of Agriculture and the Ministry of Environment collaborate on an organic school agriculture program, involving 200 middle schools where school children in the agricultural club grow organic vegetables and sell to the school kitchen. Organic agriculture is now also included as a chapter in the agriculture textbook for high schools.

#### Best Practice Example

#### Best Practice example: The National Program for school vegetable gardens in Costa Rica

For more than 20 years, the Costa Rican government has been operating the "Programa Nacional de Huertas Escolares", a national program to promote vegetable gardens in schools. The program provides financial resources, capacity building and advice for schools to initiate their own garden projects, with a strong focus on environmental practices including organic gardening.

The objectives of the program are:

- To supply school canteens with fresh and healthy food;
- To capacitate the teachers to strengthen food security within Costa Rican communities by promoting environmental consciousness, team work and the importance of healthy food;

- To support the development of the pupils' healthy eating habits, particularly a balanced diet, rich in vitamins, minerals and proteins;
- To make the children agents of change in order to encourage families to also develop small auto-consumption gardening projects.

The program has existed for more than 20 years but in the past 10 years it has put a focus on non-chemical gardens. The program's budget is about EUR 254,000 per year. It supports about 1,000 school garden projects throughout the country, 75% of which are organic (others consist of various environmentally-friendly projects such as biogas production, small livestock production, tree nurseries, etc.).

The program is managed by the Equity Programs Unit in the Department of Food and Nutrition within the Ministry of Public Education. Other public institutions, such as the National Institute for Learning, or the Ministry of Agriculture, participate in the promotion of the program. The program provides technical agronomic advice to the schools, but only employs two technicians for the whole country. Schools must therefore seek advice also from the extension staff of the Ministry of Agriculture. In 2010, FAO established a program to support family farming in Costa Rica, which also supports organic production for supply to the school canteens in rural areas.

It is considered that this program has contributed significantly to raising awareness of organic agriculture in the country in the past decade.

#### Possible pitfalls and challenges

FAO notes the following<sup>70</sup>: "It is not easy to choose what to imitate from the many models of school gardens that exist around the world. Many projects disappear from public view after they are launched. Mistakes and failures, which could be instructive, are seldom published. There is a serious lack of evaluation of the long-term impact of projects that may have had impressive initial results. Do these gardens still exist? Are they still productive? Some of the most demonstrably successful initiatives are longterm 'garden movements', characterized by slow growth over a number of years, continuity of support, and gradually increasing involvement of the community. They often take a holistic approach, integrating gardening, nutrition, school food, education and environmental concerns. With organic approaches, inputs are low, except where irrigation infrastructure is called for. Such schemes start small, taking little for granted in terms of capacity and interest. Schools opt in, inspired by other schools or motivated by small grants, choose their own pace and measure their own progress. In most cases the gardens are seen as important contributors to self-reliance and aim eventually to be self-supporting; schools 'graduate' when they no longer need help. There is a long-term coordinator or a coordinating group, which helps with resources and promotes mutual support and exchange of experience and information".

It is essential for the success of the project that the actual growing is somewhat successful. In places with long school holidays during the growing seasons it can be a challenge to have someone tending the garden. Similarly it can be challenging to engage pupils if the harvest takes place after they finish school.

<sup>&</sup>lt;sup>70</sup> A New Deal for School Gardens, available at <a href="http://www.fao.org/docrep/013/i1689e/i1689e00.pdf">http://www.fao.org/docrep/013/i1689e/i1689e00.pdf</a>

#### f. Export support

# Political justification

Increasing the export of organic products is a way for countries to earn foreign currency and improve their trade balance. It is even more so than with conventional agriculture, because organic agriculture requires proportionally much less commercial inputs (which are often imported) and relies more on the countries' own local resources. Combined with premium prices for organic, this results in better national value creation. In addition, as organic markets are demanding markets, it helps moving exports into a quality segment, instead of a bulk segment.

A well-developed organic export sector can represent a significant amount of the overall national trade balance. Growth can also be achieved in a relatively short time. For example, Tunisia increased the value of organic exports from EUR 7 million in 2004, to EUR 35 million in 2008 and to around EUR 140 million in 2015. This represents an average growth rate of 30% per year over the decade. This spectacular growth was the outcome of very pro-organic government policies and particular pro-organic export policies.

Developing organic exports is also a way for countries that do not yet have a significant domestic demand for organic products to still encourage production development, stimulated by foreign markets. Tapping into the growing global demand for organic products represents a significant economic opportunity for agricultural export economies.

Hence government support to kick-start and boost organic export market chains is a sound investment for countries to make, with returns that will be, not only in terms of environmental protection and job creation (public goods afforded by organic agriculture) but also in terms of earning foreign currency.

# Suitable contexts

Support to organic exports can be implemented at various stages of development of the organic sector. It will however be less suited to a context where the country is essentially an importing country for organic products where local production is not well developed despite high domestic demand.

Support for organic exports can be implemented regardless of the organic regulatory context of the country. Some countries can be large exporters of organic goods without having a domestic organic regulation: their producers simply abide by the regulations of the importing markets. It will be clear which operators are certified organic for foreign markets and those can still be prioritized in export support schemes.

Export support is practiced to various degrees by almost all countries, even those that are otherwise on the low side in terms of government culture of intervention on the agricultural sector.

Export support for organic businesses can contribute to the policy objective of earning foreign currency, and to the objective of encouraging societal benefits from a wider adoption of organic agriculture on the national territory. It will however not be relevant to the objectives of increasing self-sufficiency in organic production or to the objective of increasing access to healthy food for domestic consumers.

# Possible modalities of implementation

Perhaps the most common type of support in this area is for government agencies to fund or subsidize organic companies to exhibit in, or attend, international organic trade fairs such as BioFach in Nuremberg. Travel costs and booth space is very expensive for small companies starting off in the organic export business, and giving them support to attend an international organic trade fair (with or without a booth) can be a very good way to enable them to make initial business contacts abroad, as well as get a sense of the demand and trends in this sector. Governments often organize and subsidize exhibits by individual companies in one pavilion under the country's banner. One intensive way for a country to promote its organic "brand" is to arrange the designation as "country of the year" at the BioFach Nuremberg. Countries that have supported their organic sectors by financing this action include The Netherlands, India, Denmark, Italy, Poland, and Brazil.

Trade missions taking organic companies abroad with an organized program of visits and meetings is another avenue for export promotion. This can also be packaged in the form of an "Organic Day" abroad, during which the domestic companies promote their products to the foreign market, as was done with the Tunisian Organic Day in Dubai. This event was deemed successful, as some Dubai specialty stores with wide regional reach became patrons of some of Tunisia's organic products.

Some countries (e.g. Tunisia, USA) provide to their organic producers and traders information on the organic sector and markets in other countries, including regulatory requirements. In Tunisia, seminars have been organized to provide export market information. Alternatively the government can give funding to organic associations for them to organize capacity building (in the form of training, seminar or tailored advice) of organic companies on how to access international markets. In the USA, USDA has funded the Organic Trade Association's online Organic Trade Guide, which provides easily accessible and country-specific information on organic markets and regulatory requirements.

Alternatively, the government can give funding to organic associations for them to organize capacity building (in the form of training, seminar or tailored advice) of organic companies on how to access international markets.

The other way round, governments can fund potential buyers to come to their country

and visit a range of organic producers and exporters, as was done by the Uganda Export Promotion Board.

Another type of support is to fund or subsidize market studies targeted at export markets. These can be either generic studies for the whole national export sector, or commodity-specific studies, or even studies done by private companies for their own export development.

Often, export support is embedded in value chain development projects, where successful export marketing is the ultimate objective.

Some countries do some general promotion for their "organic brand", meaning that they support the marketing of the image of their country towards foreign consumers and buyers. This can be in various forms, e.g. a video or presentations in conferences. It is often associated with the promotion of the national organic label as a brand, and can bank on the image of the "purity" of a country (e.g. mountainous countries) or it can try to correct the negative image of a country in terms of contamination. The compilation of a directory with export ready companies is also common. An alternative more specific approach is to grant funding to private organic sector organizations to conduct their own marketing campaigns on foreign markets.

A more anecdotal instrument is, for the few countries that still levy export taxes on agricultural commodities, to exempt organic exports from those taxes (e.g. Argentina).

One notable concept is the <u>Organic Trade Point</u> (OTP) developed in 2006 by the organic sector organization NOGAMU, in Uganda. Although it was funded through foreign support (development cooperation), a similar concept could be replicated and funded by government in exporting countries. The OTP is an online one stop center and a database that provides local organic farmers and exporters and importers who are interested in Uganda's organic produce necessary market information access. The OTP, which is linked with major international market information portals, is also a focal point for determining produce availability and their seasonality as well as the local growers' productive capacity.

#### **Country** examples

**Tunisia** is among the most pro-active governments in terms of encouraging its organic sector to export to foreign markets. Various public institutions have supported Tunisian exporters in understanding foreign market requirements and promoting their products towards foreign buyers, abroad and within Tunisia. For more information, see the Best Practice example textbox.

In **Morocco**, the government, including the Ministry of External Commerce, signed a joint public-private contract with the organic industry in 2011 for the development of organic agriculture. One axis of the plan is the development of the export sector and EUR 4.6 million has been allocated for this purpose.

The **Uganda** Export Promotion Board (UEPB), in recognition of the role of organic exports in the economy, and to foster competition among organic operators producing for export, introduced the Best Organic Exporter and Organic Fruits and Vegetable Exports Awards within the President's Awards for Exports. The UEPB also co-organized buyer tours whereby European organic buyers visited Ugandan producers.

The government of **Argentina** announced in March 2016 the complete removal of export taxes on organic products of plant origin, in order to promote organic exports. This decree was published in the Official Gazette, and applies to organic products that are certified under the national organic law.

In **Mexico**, the government established in 2008 "Impulso Orgánico Mexicano", the national association for the promotion of organic products, which acts as the Promotion Committee of the National Council for Organic Agriculture (working both to promote domestic sales and export). It elaborated a promotion plan for organic product exports, which was submitted to the Mexican export promotion agency. Additionally, the Mexican Ministry of Agriculture, via its Agricultural Marketing and Market Development Service Agency (ASERCA), conducts campaigns for the promotion of Mexican organic products abroad. Mexico's participation in the Nuremberg BioFach is also supported.

In **Costa Rica** the government provided financial support to organic companies for exhibiting at international organic trade fairs, such as the BioFach.

In **China** the central government does not provide specific support for organic companies to access export markets, but some of the provincial governments<sup>71</sup> do, especially in terms of financial support for companies to attend BioFach fairs.

In **Indonesia** the district of Semarang has facilitated the certification of organic vegetables and access to export markets to Singapore and Malaysia. The Indonesia Organic Alliance also received some support from the government for their booth materials at the BioFach exhibition fair.

In **Nepal** the government subsidizes the cost of organic certification for export markets, as well as the establishment of internal control systems. This support is provided every year under the Ministry of Agriculture Development, Agricultural Commodity Export Promotion Program. In the year 2014/15, six organic companies benefited from the grant program.

#### Best practice example

#### Best Practice Example: Tunisian government support to organic exports

Tunisia has supported organic agriculture actively since 1999, primarily with an export-focused ambition. Tunisia first saw itself as having a comparative advantage in the supply of organic products for the EU market, and put a range of measures in place to ensure this opportunity was tapped into. Recently, Tunisia has been looking at other emerging markets and supporting its exporters to enter those promising markets.

<sup>&</sup>lt;sup>71</sup> Those include the provinces of Xinjiang, Jiangsu, Beijing, Hubei, Sichuan and Guizhou.

The Agricultural Investments Promotion Agency (APIA), run by the Ministry of Agriculture, promotes private investments in Tunisian agriculture and agricultural exports. In line with the government's general policy in favor of organic exports, APIA has conducted a number of activities that have facilitated the entry and penetration of the country's organic products in international markets. In 2008, APIA financed a study for a promotion strategy for Tunisian organic products on specific markets. APIA regularly participates in international organic trade shows and exhibitions, including the BioFach Nuremberg organic trade fair, at which APIA supports a Tunisian Country Pavilion where Tunisian exporters can feature their products. It also regularly organizes special events in Tunisia to present Tunisian organic products to potential foreign buyers (like the "Tunisian Organic Day").

Other Tunisian governmental institutions also promote organic product export. In 2016, the General Directorate for Organic Agriculture, part of the Ministry of Agriculture, in cooperation with the Center for export Promotion of Tunisia, organized an information day for organic exporters, with a focus on the US and Dutch markets. The Tunisia-China cooperation council organized an information day in 2016 to provide awareness and information to national producers on Chinese market opportunities. The Tunisian Chambers of Industry and Commerce also partner with their foreign counterparts on the organization of special days on organic investment and export opportunities. In 2016, the Minister of Agriculture initiated the production of a documentary film on Tunisian organic products, to be used by Tunisian embassies and economic representatives abroad.

Together with numerous other measures implemented by the Tunisian government to promote organic production, the above export promotion policies have paid off: the value of organic exports increased from EUR 7 million in 2004 to around EUR 140 million in 2015.

#### Pitfalls and challenges

The hurdles for exports of organic products are the same as for conventional. But, in addition, the market is much smaller, and the quality range is narrower. Mostly only premium qualities are possible to sell as organic, unless it is a feed product. Certain qualities are not possible to sell at all, and there are numerous obstacles relating to standards and certification requirements and procedures.

Even with subsidies, it may be difficult for small companies to afford attending international organic trade fairs (unless their participation is nearly completely funded). Exhibiting at the fair is only the first step: unless exhibitors have an attractive display, samples, good communication abilities and language skills, it is very difficult for them to get value out of a stand. It might be better for those that are not ready to simply visit the fair instead of exhibiting.

Another problem is the volumes of products, or quality that small exporting companies are able to offer, which often do not match the expectations of the large traders.

There is a general tendency to underestimate the difficulties in export marketing. There are cases where local prices are higher than export prices, and even where local prices

for non-organic products are higher than organic world market prices: this is the case for honey in many countries.

# g. Organic Trade agreements / equivalence negotiations

(Note: this type of measure is unlikely to be used in Sub-Saharan Africa in the coming decade, given that no country in that region has yet developed an organic regulation and a credible organic control system. We therefore deleted the content of this section in this Sub-Saharan version. Readers can refer to the global report to learn more about this topic).

# 4. Enabling measures

# a. National Data production and dissemination

#### Political justification

The existence of consolidated data on the national organic sector is a very important enabling factor for the growth of the sector because:

- It is very helpful for the development of a sound national strategy to develop the sector, to know the number and location of organic producers, the type of products produced organically, the existing marketing channels, the importance of organic imports, etc.
- Precise data on organic operators allow policy makers to better plan the type and amount of support needed, to calculate budget and expected coverage of their policy measures, etc.
- For market actors, good and reliable data about the size and development of the organic market is of utmost importance to make informed decisions, and having access to a directory of national producers and of existing organic businesses facilitates them in establishing commercial relationship (e.g. in identifying new suppliers).
- For consumers, having access to a directory of organic farmers (especially those that sell products through direct marketing) and markets can help find local organic products to buy.
- In international negotiations the importance of the domestic national organic sector and market needs to be substantiated by solid data.
- It is important to guide researchers, academic institutions and other support structures in providing adequate outputs and services nationally.

- Tracking sector growth is important to demonstrate the potential of organic agriculture and to attract investors, organic input manufacturers and other supporting businesses.
- Comparative annual statistics on the organic sector also enables the assessment of the impact of national (or regional) policies (including trade agreements) on organic agriculture and the adjustment of those policies to maximize effectiveness.

Compiling national data on the organic sector is a typical public good service that will benefit multiple stakeholders, including the government itself. Unless there is a strong national organic association that can take on this task (and even so, they would typically need on-going financial support to do it), the responsibility for this falls logically on the national government. However, business data are often collected by national industry bodies (when those exist) while more detailed production data (yields) are collected by research or extension services.

#### Suitable contexts

Data collection support can be done in any culture of government intervention, and is relevant to any objective of policy support.

Data collection and dissemination is a policy measure suitable to all stages of development of the organic sector, from embryonic stages to stages of well-developed production and consumption. The intensity of the data collection (frequency and level of details) needed will vary depending on the development stage of the sector. At early stages, a punctual study to roughly locate organic producers and have an idea of their production systems and the existing market channels is enough to inform subsequent policy action. When the organic sector is well developed and organized trade is significant, then detailed production data and organic trade figures become important to monitor on a regular basis.

Data collection and dissemination can also be implemented with or without an organic regulation or an official organic guarantee system. Most of the time, when governments take on the tasks of regular data collection on the organic sector, it is when they have established an organic regulation. Indeed a regulation provides clear criteria for who may be considered organic (legal definition). It also implies a duty from the side of the government in terms of enforcement, for which the competent authority should anyways have the list of certified organic operators and access to the data of the accredited certifiers. However, in unregulated systems, the government may still conduct (or support) data collection, for example in the form of survey and studies (state of the organic sector in their country, e.g. the study financed by the South African Ministry of Trade and Industry): this should actually be a pre-requisite to the development of any organic action plan, policies and regulations.

Data collection and dissemination is a policy measure that is suitable regardless of the culture of government intervention on the organic sector, as data availability is as relevant in a free market approach as in more interventionist government cultures.

Finally, data collection and dissemination is useful regardless of the objective behind the support to the organic sector (be it to improve the country's trade balance or to improve agricultural sustainability).

#### Possible modalities of implementation

In early stage of development, governments may conduct or finance a national survey/study on the situation of organic agriculture in the country, including an overview of organic production, active stakeholders (e.g. associations, businesses, certifiers), the standards and labels in use, and existing market channels for organic products. Such a publicly available study report supports the organic sector development and can serve as a basis for subsequent national organic action plan development.

The cornerstone of an organic data system comprises statistics on the number of organic producers, and the area certified including crop information. In regulating countries this can be facilitated by regulations that require certification bodies to provide the data to the competent authority. Precise data on non-certified organic production are more difficult to collect and make available to the public. Nevertheless the government may approximate the number of non-certified organic producers by other means, including cooperation with the national organic association. It can also be done by including in the national agricultural census a question on whether producers considers themselves to be organic (even if not certified) – an approach that can however give reliable results only in countries where farmers are literate and where the meaning of organic is clear to farmers.

Data on the location of organic producers and their sales channels facilitate publication of a directory of organic farms, which can be used by traders, caterers, retailers and consumers to identify organic farmers in their regions. The transparent publication of all certified operators also contributes to supporting compliance, as there will be more eyes watching what happens on those organic farms.

Data may also be collected on organic processors and other organic businesses, and on points of sale. National market studies on market figures and organic consumer behavior and trends are also very useful to the organic industry.

#### **Country** examples

In **Latin America** most countries have an organic regulation and hence data on area, production, and in some cases livestock, are available for several countries. There are some very good examples of collection systems for export data (Argentina, Chile, Dominican Republic, Ecuador, Peru), which by far exceed the scope and quality of export data that are available from major organic markets such as Germany, where nothing is available. The strong focus on export data reflects the importance of organic exports for Latin America.

**Argentina** has one of the best data collection systems in Latin America for area, livestock and export volume data, including exports by destination. Each March a comprehensive, consistently structured, detailed report is issued by SENASA, the authority in charge. The Ministry is currently financing the establishment of the Guía Orgánica (Organic Guide) interactive website in which consumers interested in organics can find organic points of sales, products, and product information.

**Peru** now provides detailed data on organic exports (volumes and values), which are compiled by the export promotion agency PromPeru, an outstanding examples of collection of export data. Area data and producer numbers are provided by the control authority SENASA.

In **Taiwan**, the Organic Center at the I-Lan University developed the Taiwan Organic Information Portal with funding from the Council of Agriculture. It consists of three parts: the system to disseminate organic agricultural information; the system derived from the organic certification database; and the organic e-commerce system, linking producers and consumers. The portal contains tools for consumers to find organic farms in their neighborhood or to buy organic products online. Area data and producer numbers are available from the website of the Taiwan organic agriculture information Centre.

In **China**, CNCA (the National Certification and Accreditation Administration) is responsible for collecting, compiling and releasing national statistics on organic agriculture. Since 2005, collection efforts have continuously been enhanced. In 2014, a "White Book" on organic farming in China was published, giving access to the data (area, production, exports, imports, domestic market) and substantial background information. An English translation of the white book by the company "Organic and Beyond" has made the information internationally accessible. China is currently working to integrate the data for the international certifiers, thus making the picture more complete.

In **India**, APEDA, the Agricultural & Processed Food Products Export Development Authority, compiles data on exports through Tracenet, an online software for organic certification which issues the Organic Scope and Transaction Certificate. Basic data (area) and some export volume data are displayed on the APEDA website.

In **The Philippines**, the 2010 organic law mandates the BAR (Bureau of Agricultural Research) to coordinate with other agencies on data and information on organic agriculture. Since in The Philippines, the vast majority of organic producers are not third party certified, organic certifiers cannot be used as the main source of statistics. The National Organic Agriculture Program (NOAP) maintains a database and publishes yearly statistics that include third party certified, PGS-certified and non-certified organic producers. The data is obtained through agricultural technicians in the Local Government Units, who are assigned to implement the NOAP and expand the adoption of organic agriculture in their area of responsibility.

In **Tunisia** data on production area and export are collected by the Ministry of Agriculture. The data and producer lists are presented on the website of the Technical Centre of Organic Agriculture. Tunisia is the only country in Africa that has a governmental data collection system in place.

#### Pitfalls and challenges

On a global level, data on organic agriculture has grown and improved considerably in the past years, particularly data on organic agricultural land. However, challenges remain, including data gaps and issues related to definition, classification, standardization, quality, and access. Therefore, increased attention to data collection on organic agriculture is warranted in order to fill data gaps, harmonize data and improve data quality.

There is still a major lack of data on organic agriculture in many countries. Even when governments have set up data collection systems for organic data, the number of indicators collected is still relatively low.

There is also a clear need to develop improved statistical processes to increase the accuracy of data about the organic market, specifically by paying more attention to coverage and adopting improved sampling procedures in the case of data that are not based on a census (in particular, retail sales). In cases where only expert estimates are available, these should be checked against other sources. It is recommended to apply the principles as laid down in the OrganicDataNetwork's (2014) OrmaCode.

Additionally, some efforts should be done to harmonize statistical processes for organic data collection at the international level, to improve comparability and coherence.

Some of the data collected (even by official sources) is sometimes not plausible. Governments that collect organic data should establish a system of routine quality checks for organic market statistical data by:

- balancing data accuracy versus timeliness in data publication and dissemination,
- applying plausibility checks, and
- comparing and crosschecking non-official statistical data from at least two independent sources to increase accuracy and consistency.

Data is most valuable when it is collected over time in a reliable, consistent, and frequent manner. Therefore governments should ensure that there is permanent funding for this activity and for maintaining long-term networks of data providers.

# b. Support the institutional development of organic associations

#### Political justification

Organic (national) associations play a decisive role in the development of the organic sector. Historically, organic associations have initiated most elements of the organic sector, ranging from certification (with pioneers like the Soil Association in the UK and CCOF in the USA), to training and advice to farmers, organic consumer fairs, national organic logo, and consumer awareness campaigns. Organic associations, particularly if they are federated at the national level, and provided that they are strong politically and financially, can take on many of the "public interest" tasks that are necessary to build the organic sector. Hence, as civil society organizations, they can relieve the government from directly managing some of these tasks, even though they will still benefit from overall government support.

A well-federated organic sector at the national level is also key to involving the private sector in policy making, and to setting-up public-private partnerships for organic development. In terms of policy development, a national organic association can play a strong role in resolving divergences of opinion within the organic community, and forming consensus and compromises needed for advancing policies, for example the details of standards. Governments often emphasize the importance of sector constituents speaking to them "with one voice".

The risk of exclusion by the local farming community is still a factor for many farmers considering converting to organic farming. Organic farming associations play a vital role in offering a community in which organic farmers can feel a sense of belonging and interact with fellow organic farmers. Thus, government support for organic associations is connected to policy aims to convert more producers and land to organic farming. Beyond the political and social usefulness of organic farming associations, there are various examples of where a national organic association has played a decisive economic role in the development of the organic supply chain. One example is NOGAMU, the organic umbrella organization founded in Uganda in 2001. NOGAMU's work has been the principal factor in the growth and development of Uganda's organic sector. The work has included capacity building, PGS development, and consumer awareness. But also NOGAMU has assumed a very pro-active marketing role, acting as a supply chain facilitator, and creating the first specific organic market outlets and basket homedelivery scheme. Another example of a national organic association with high impact on organic development is Bio Suisse in Switzerland. They fulfill a number of functions, including standard and common logo management, public awareness raising campaigns, and market data collection.

Despite the importance of organic associations, they often struggle to establish themselves. Especially in countries with an emerging organic sector, public support, whether through the local government of through foreign aid, is often necessary to kick start an organic umbrella organization. This however is usually a good public investment because such an "organic infrastructure" organization, once well

established, will be able to find other resources (in their membership and through external funding) to carry out many of the "public interest" tasks such as data collection, capacity building, political facilitation and ownership building, market development and advocacy for organic agriculture. Governments may also consider providing institutional funding on an ongoing basis to such organizations to support the provision of some of these services (such as capacity building, data collection, and communication to producers and consumers).

#### Suitable contexts

National organic associations are useful in all cases. This means, regardless of the stage of development of the sector, of the regulatory framework or even of the policy objectives, supporting the institutional development of organic associations will be a suitable and relevant measure. The only case in which this measure might not be realistic is in cultures of no government intervention in the agricultural sector, as supporting a sector organization may be considered market distortion.

# <u>Possible modalities of implementation</u>

Generally, governments provide funds for organic associations to implement particular activities, such as consumer education, capacity building of producers, or participation in policy design.

However, some governments have provided institutional support to organic associations by funding their core activities and expenses such as staff salaries, contribution to administrative costs, or purchase of office equipment. Institutional support presents the advantage of empowering members of the organization to democratically set priorities for the organization, while funds given for specific projects tend to impose external (government) priorities.

Many organic umbrella organizations in developing countries have received support not from their government directly but from foreign donors. Local governments can nevertheless prioritize the inclusion of such support measures in their action plan for organic agriculture – which increases their chance of being supported by external donors – and in their negotiations for development cooperation projects.

#### **Country** examples

In 2014, as part of the PLANAPO (the government plan for organic agriculture development) **Brazil** launched a program named ECOFORTE that allocated EUR 70 million to support 30 organic agriculture, agroecology and wild collection networks of organizations. For more information, see Best Practice text box below.

In **Saudi Arabia**, the Saudi Organic Farming Association received financial support through the Organic Farming Project financed by the Saudi government.

In **The Philippines**, in 2012 the Organic Producers and Trade Association (OPTA) received about EUR 15,000 funding from the Philippines Department of Agriculture to implement several activities including national and regional events, as well as market research.

#### Best practice example

#### Best Practice Example: Support to agroecological and organic networks in Brazil

In 2014, as part of the PLANAPO (the government plan for organic agriculture development), Brazil launched a program named ECOFORTE (Program to strengthen and increase the networks on agroecology, wild collection and organic agriculture). The program allocated EUR 70 million to support 30 organic agriculture, agroecology and wild collection networks of organizations within 2 years.

The program was implemented through public calls for proposals to select networks of organizations to be supported. Networks of organizations were defined as groupings of at least three organizations such as producer's cooperatives or associations. The networks should mobilize, build capacity and disseminate information and technology to strengthen their organic and agroecological member organizations.

Each network applicant could request up to EUR 504,000 to implement their activities within two years. These activities could include: purchasing of machinery and equipment; building or infrastructure development; support for value chain development and marketing; increasing women and youth participation; institutional capacity building through exchanges, workshops, training, meetings; research (feasibility and impact studies); financing and business plans; technical assistance for compliance with the national regulation on organic production; integration with education institution and creation of study and research centers within education institutions. The financial assistance requested had to include 50% of infrastructure development costs and 50% of management, capacity building and technical assistance costs.

#### Pitfalls and challenges

If the government is too proactive in supporting the development of a national organic sector association in a rather top-down approach, the risk is that there isn't enough buy-in from the stakeholders, and hence the representativeness and the sustainability of the organization will be affected. It is therefore safer for the government to support existing organizations including, in case no umbrella organization has emerged yet for the organic sector, supporting a variety of NGOS and associations active in organic agriculture, and encouraging and supporting financially their own initiatives to consolidate when the time is right.

Legitimate minority interests (e.g. of farms with unusual production, disadvantaged groups, etc.) are not always properly represented by national associations or federations. Also, the interest of non-organic farmers who might want to convert to organic may be under-represented by organic associations. There might be cases where

a national organization favors support to existing organic farmers rather than support to conversion of new farms.

The organic business sector, processors and traders, are often less inclined to cooperate and share information, than the farmers. There are few countries where a sector body has managed to organize both farmers and traders in the same association.

In some countries, it has not, to date, been possible to reach a consolidated national organic umbrella organization. It requires a democratic culture, as well as a culture of compromise to resolve conflicts. Even in countries that manage to overcome divergences and build such umbrella organization, a challenge will often be the lack of own resources, if members are not willing to commit resources to pay for open access common good services.

#### c. Build organic expertise within the public sector

#### **Political justification**

When a government decides to implement a series of policy measures to promote organic and/or if the government is implementing an organic regulation, a competent authority will be appointed to oversee the resulting programs. The mere appointment of a "competent authority" does not ensure the actual competence of the government employees that will be working on organic topics (sometimes, they also work on many other topics in parallel). One key element of sound policy implementation is to ensure that government personnel who will be in charge of organic development understand very well what organic agriculture is, the national sector and its constraints, and the positions of the various stakeholders on technical organic matters. Building capacity of government staff is therefore a prerequisite for further policy design and implementation, particularly of the staff of the unit in charge of organic agriculture, but it can also be relevant for other staff that will have to deal with organic issues one way or another.

Beyond the fact that government staff working on organic should be knowledgeable on the topic, there is a value in creating specific organic expertise within a public institution (this could be public or semi-public), which can serve as the go-to institution for all national matters organic and coordinate between ministries and agencies. Such an institution can produce statistics, resources for the sector, policy recommendations, organize national events, etc. It can serve the role of public facilitator and knowledge hub for organic agriculture and ensure that government decisions will be informed by well-versed experts working with the public interest in mind. There are also many experts in the private sector but those might often have private interests at stake. The other advantage of having a public institution specialized in organic agriculture is that it can retain knowledge and carry out activities over many years, based on more or less permanent funding.

#### Suitable contexts

If government is going to intervene in favor of organic agriculture in any way (whether it is just to regulate it or also with supportive measures), it is important that some personnel in government institutions be knowledgeable about the organic sector. Regardless of the stage of development of the sector, of the culture of government intervention, of the regulatory framework or even of the policy objectives, building expertise on organic agriculture within public institutions will be a suitable and relevant measure.

# Possible modalities of implementation

Governments can pursue a strategy to broadly increase organic agriculture literacy throughout its personnel, or to ensure that one or more of its employees have strong background and knowledge of the organic sector – or both. Formal teaching – learning programs are well-suited for both strategies. They can be packaged in several ways, ranging from in-person courses and workshops for staff to online learning. There are several options for further knowledge building. IFOAM – Organics International offers intensive Organic Leadership Courses to "students" from government and non-governmental backgrounds. The course includes 150 hours in-person sessions plus online learning sessions. Training for government staff may also be obtained through agreements with national or regional organizations. Experts within government agencies or hired as consultants are another option for design and delivery of customized organic training programs. Training programs can be part of an arrangement with an international development agency or intergovernmental cooperation project.

Another way for a government to gain expertise is to hire organic experts in governmental positions. This was the case in the United States, where the USDA hired the former manager of organic certification for the State of Washington to head its National Organic Program, and he subsequently hired other organic experts for key staff positions. Moldova hired an expert organic agricultural consultant to a high level position in the Agricultural Ministry. He was able to operate from a position of authority to develop strategy and an organic work program. Government employees may also be trained for organic-sector roles outside their formal employment, such as in conducting organic inspections for certification bodies.

There is value in setting-up a dedicated unit or agency to be in charge of the organic sector, and to build organic expertise within such a unit. A common way is to have an organic unit composed of a few personnel, within the Ministry of Agriculture. Another way is to set-up a dedicated separate agency, in charge of organic agriculture development in the country.

While it is important that the public sector develops its own expertise in the field of organic agriculture, it continues to draw upon expertise in the sector and academia. To institutionalize such practice, the government can include organic experts from the private sector in their working groups or even in their delegations to international or

regional meetings. For example, many countries have had private sector representatives in their delegations to the Codex Alimentarius' labeling committee in charge of organic standards.

The government may also request advice on organic policy matters from national or international experts and organizations such as IFOAM-Organics International. This is preferably done in the form of consultations, where the expert will work together with the government personnel on a given topic – perhaps one of the best way to build government staff capacity on the job.

#### **Country** examples

In **Turkey**, the government engaged in 2011 in a bilateral technical cooperation project with Germany, through which FiBL provided capacity building to staff of competent authorities and government organic consultants. Multi-stakeholder dialogue and intensive training were the main pillars of the project. Expert modules were developed for all points of the supply chain. Then training courses and workshops were held for government and private sector consultants, competent authorities, control personnel, producers, and technical staff of processors/traders. Demonstration farms were also organized as a component of the training. In addition to the trainings there were intensive peer exchanges between staff of the German Office for Agriculture and Food, and the Turkish Ministry of Food, Agriculture & Livestock. The project experienced success, as indicated by the decreasing incidence of quality problems in the organic supply chain from Turkey to Germany.

In **Tunisia**, the development of the organic sector was basically government-led, and started with the creation of four specialized central and regional level administrative government agencies and technical institutions, which have been and remain the driving force behind the impressive growth of the Tunisian organic sector.

**Mexico** invested EUR 27,000 in the year 2009 for capacity building of government staff on organic agriculture.

#### Pitfalls and challenges

While it is important that the government develops its own competence, there is a risk for the competent authority to think it represents or fully understands the interests of the organic sector even without proper consultations. It is therefore crucial that the government recognizes the expertise of the private sector and the need for broad consultations and for public-private partnerships in policy implementation. To enable the competent authority, organic agency or other government structure working on organic agriculture to have sufficient consultation with the private sector, funds should be set aside. This might include paying for travel costs for stakeholders to attend national meetings or having several regional meetings to ensure proper participation.

The mandate for an organic unit should be clear enough and have the backing from the higher level, to limit the risk that its efforts are obstructed by intra-ministerial posturing.

In some public services there is considerable rotation of staff, which is problematic for the development of expertise. The same applies to countries where a big proportion of the administration is changed when a new government comes in. In such cases, the creation of a special agency, separate from the ministry, can be a solution to increase staff continuity.

# d. Support to PGS development

#### Political justification

Participatory Guarantee Systems (PGS) are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange. PGS represent an alternative to third party certification, specially adapted to local markets and short supply chains. They are also sometimes referred to as 'participatory certification'. Participatory Guarantee Systems share a common objective with third-party certification systems in providing a credible guarantee for consumers seeking organic products. The difference is in the path to accomplish this, with the emphasis being on stakeholder participation and transparency.

PGS offers numerous benefits, including improved access to organic markets through a guarantee system for small-scale producers (those systems are much more affordable than third party certification), increased education and awareness among consumers (by involving them in the guarantee process), promotion of short supply chains and local market development, and farmer capacity building and empowerment. In other words, supporting PGS development is a way to promote organic agriculture adoption, but also livelihood improvements through market access and empowerment of smaller farmers. As the concept of PGS is not yet widespread in all countries and regions, there is a need for public support in the initial stage of PGS development, to provide resources for investment in capacity building and organizational development, after which those systems can operate in self-sufficient ways.

#### Suitable contexts

Support to PGS development is a measure suitable to any context (all stages of development of the sector, absence or presence of a regulation or officially referenced OGS, different cultures of government intervention). The only context in which it will be difficult to obtain (at least from the central government) is the case where there is an organic regulation in place which excludes PGS, but examples from the Philippines or Peru shows that even then, it is possible to obtain support from PGS either from local

governments (who may disagree with the overall national regulation) or from other sections of governments than the competent authority in charge of the regulation.

PGS development is relevant to all objectives of policy intervention except the one to earn foreign currencies through organic export.

#### Possible modalities of implementation

The most important contextual factor in terms of PGS development is the organic regulation context. It is crucial that, if the country regulates organic agriculture, the organic regulation does not hinder PGS development by deliberately or inadvertently not including them, thereby making these systems illegal. Concrete recommendations on how to develop pro-PGS organic regulations can be found in the <a href="Organic Regulation Toolkit">Organic Regulation Toolkit</a> published by IFOAM-Organics International.

Aside from PGS being recognized at the same level as third party certification, and PGS-verified operators accessing the same policy benefits as third-party certified operators, there are ways in which governments can invest specific resources in promoting PGS development. A common way to do this is to finance projects that set up PGS groups. This is particularly relevant in countries where the PGS concept does not exist yet, to introduce it in the form of pilot projects. It can however remain relevant at later stages, where PGS projects can be replicated and even possibly scaled up into a very large national PGS program, as in the case in India.

These PGS projects should run for at least three years in order to give them a better chance of becoming self-sustaining after the project period ends. If the full funding of multi-year PGS projects by public authorities is not possible for the national government, it may consider submitting a proposal for international cooperation projects and external donor funding. However, the scale of a PGS setup project can be adapted to the size of the budget available, and it is possible to do something even with low budgets (setup one small PGS in a municipality, for example).

Aside from fully-fledged PGS projects, financial support can also be given to existing PGS initiatives, which are partly self-funded or funded through other sources. This is, for example, what Mexico did with the support to the national PGS network in 2010. Funding is particularly relevant to cover expenses such as farmer training, committee meetings, development of standards and operating manuals, as well as communication and networking.

# **Country** examples

The most progressive example of government support to PGS is **India**, which now has a government-sponsored national PGS system, as well as several government-funded organic support programs with PGS certification included. The Ministry of Agriculture initiated a PGS technical cooperation project with FAO in 2005 and launched in 2011 a nationwide PGS development program implemented by its National Center for Organic

Farming (NCOF) under the Ministry of Agriculture. This program has shown impressive outcomes, leading to the certification of 21,240 organic farmers through PGS in the year 2015. The government has an ambitious vision to reach 200,000 PGS certified organic farmers by November 2017 (see more in the Best Practice example text box below).

In **Peru**, PGS initiatives have been promoted for more then 11 years by various stakeholders including the public agricultural university of La Molina (UNALM). Although the national organic competent authority and regulation do not recognize PGS, there are various regional authorities that have officially recognized and supported PGS. To date, PGS are implemented in 10 regions of the country, often with the support of the local governments. For instance, between 2009 and 2012 the Regional Governor of Huanuco co-financed a project for the implementation of a PGS, which now certifies more than 200 producers. The governor has also introduced a regional regulation, which recognizes and supports PGS initiatives within this region. Similarly, in 2013, the Regional Governor of Abancav introduced a regulation to recognize and support PGS. In other areas, such as the Satipo Province or the Cerro Pasco Region, a program concerning development of natural resources, promoted by the Ministry of Environment, is also dealing with PGS implementation. In April 2016 the regional government of Hancavelica approved a regional regulation to recognize PGS as alternative tool to achieve sustainable development and to foster organic agriculture in the region among small-scale farmers. This regional regulation foresees the establishment of a regional PGS Committee led by the Regional Economic Development Unit.

In **Cuba**, ACTAF (Asociación Cubana de Técnicos Agrícolas y Forestales), is currently coordinating the international development project "Proyecto de apoyo a una Agricultura Sostenible en Cuba" (PAAS) which, among different objectives, aims at developing and implementing a PGS program sustained and included in the framework of the National Program for Urban, Sub-urban and Family Agriculture. This is a governmental plan; therefore introducing PGS implementation in this plan will lead to institutionalization of PGS.

In **Argentina**, the municipality of Bella Vista has taken an active part in setting up the PGS as a tool to raise awareness about agroecology and organic agriculture, eating healthy foods and sustainable production. The municipality has recognized the public value of PGS for the municipality in a council resolution (Municipal Council resolution 113/07). Following this, the municipality council has approved by municipal decree (Ordenanza 919-09) the creation of a PGS Committee and has defined its functions. The Committee is formed by public organizations, producer's organization and NGOs and its role has been to promote the creation of the PGS and to ensure the compliance of the system with the charter and the functioning of the PGS Committee. The same decree also commits the municipality to promote organic agriculture within its area. Twenty smallholder families are currently involved in the projects together with local consumers and several NGOs. It is a good example of cooperation between public and private institutions.

The government of **Mexico**, in 2010 gave support of around EUR 82,000 to the national PGS network Red Mexicana de Tianguis y Mercados Orgánicos to form 20 PGS groups.

In **Colombia** in 2009 Bogotá's Economic Development Secretariat cooperated for the first time with the network Familia de la Tierra (composed of farmers, NGOs and consumers) to conduct market research for launching an alternative channel for marketing products from indigenous and peasant farmers in Bogotá. As a result of coordinated work between organic farmers, civil society organizations, public institutions and local political leaders, this objective was formalized in a district development plan by the mayor's office of Bogotá. It strengthened the Familia de la Tierra network within an institutional environment that provided small grants to CSOs with an ecological and innovative approach. In this framework, the district government, aiming at implementing organic farming as a model for Bogotá's rural development and protecting the city against the entry of genetically modified seeds into urban kitchen gardens, supported the Familia de la Tierra network in the implementation of a PGS.

In **Bolivia** the government partnered with the United Nations in a EUR 6.2 million program to integrate indigenous Andean producers into new national and international value chains. The project trained 7,000 producers in agro-ecology and consolidated 17 PGS in the country. In February 2012, a ministerial decision approved the national technical standard for PGS, which provides for an Ecolabel in recognition of the work of smallholders. The project ran from 2009 to 2013 and involved six UN agencies working closely with specialized units of government (UC-CNAPE) and in coordination with the National Agriculture and Forestry Innovation Institute (INIAF), the Rural Entrepreneurship Implementation Unit (EMPODERAR), the Bolivian Development Agency (PRO-BOLIVIA), the Food Security Support Program (PASA) and AOPEB (the Federation of Bolivian Organic Producers Associations).

In **Costa Rica** the government provided technical and financial support for the establishment of PGS groups. The national accreditation body for organic certifiers conducts the annual audits of the PGS groups, which is needed for their official recognition according to the law. Currently, 4 PGS groups are officially approved and can make organic claims.

In **Brazil**, the Ministry of Agrarian Development supports PGS initiatives and Social control organizations (the other form of alternative verification systems allowed for direct marketing under the Brazilian organic regulation). For example, the Ministry, in partnership with the Federal South Minas Institute, carried out a diagnosis of those organizations to identify existing initiatives, and potential new ones. In 2016, around EUR 91,000 were allocated to support family farmers and technicians involved in those initiatives. For 2017, the government plans to consolidate the 18 existing PGS initiatives, train 300 extension agents in participatory certification, support the establishment of 10 new PGS initiatives and publish various resources for PGS promotion, for a total allocated budget of around EUR 268,000.

In the **Philippines**, the debate about the revision of the Organic Agricultural Act is not over: the language of the Act prohibits PGS-verified products to be labeled as organic,

but the government has given several periods of grace that have, until now, meant that this requirement is not enforced. Meanwhile, the government (for example through the Department of Agriculture-Bureau of Agriculture Research) has supported PGS implementation in the country through funding some projects including PGS development. In parallel, local governments in the provinces have played an important role in supporting PGS. The PGS initiatives in the provinces of Quezon, Nueva Vizcaya, Nueva Ecija, Negros Occidental, Lanao del Norte and Davao City were all developed and supported by their local government units, with some even allocating funds to support the initial operation, including training, committee meetings, and development of standards and manual of operations.

In **Lao**, the Department of Agriculture (DoA) has adopted PGS as part of their certification portfolio of activities, under the responsibility of their certification department. The DoA issues the logo and conducts the training, as well as the audits of PGS groups. PGS certification under this model is free of charge for farmers, as the government subsidizes all costs (through a grants it receives from the ADB PGS project – see below).

More generally in **Asia**, the Asian Development Bank, a government-funded multilateral development bank, supports PGS development in the framework of the Core Agriculture Support Program, 2011-2020. The program supports PGS development in the 6 countries of the Greater Mekong Subregion. This includes the establishment of PGS pilots in all countries, as well as a conversation with the respective governments to gain their support and recognition for PGS.

#### Best practice example

#### Best Practice Example: Support to PGS by the Government of India

In India, the NGO sector has been a pioneer in PGS and has managed to grow the PGS movement from a few farmers before 2006 to more than 6,000 farmers certified in 2015. It has also managed to consolidate the various independent NGO initiatives into one single national PGS system: the PGS Organic Council. However, there are limitations in terms of the capacity for the NGO sector to include the large number of farmers and farmer groups interested to join the PGS movement in India. The government, through its National Center for Organic Farming (NCOF), is tackling the opportunity by offering an alternative PGS system that is government-facilitated and benefits from important and stable resources enabling rapid uptake of PGS in the country.

The interest of government representatives in PGS started in the early 2000s. During 2005-2007, the Ministry of Agriculture and FAO undertook a technical cooperation program that, among others, aimed to develop PGS in India. As part of this project, FAO facilitated a national multi-stakeholder dialogue on PGS, in which some representatives of government institutions attended. In India, the mandate for organic agriculture support is somewhat shared between the Ministry of Commerce & Industry and the Ministry of Agriculture. The Ministry of Commerce is in charge of the National Program for Organic Production, including the national organic standard, certification and accreditation system, with a focus on exports. The Ministry of Agriculture hosts NCOF, whose mandate is more broadly to support organic farming in the country. NCOF became interested in the PGS concept as a way to support rapid uptake of organic farming within smallholders producing for the local market.

After some years of reflection and consultations with the NGO PGS sector and international experts, NCOF launched its PGS India program in 2011. The initiative was not aimed to compete with, but rather to complement the NGO PGS system, with the advantage that the government bears the cost of institutional networking, surveillance and monitoring as well as data management. NGOs can participate in the system and receive financial support to cover the work of data collection and upload on the central PGS website. Due to the availability of institutional resources, the PGS India network is growing very rapidly, reaching more than 130,000 farmers at the end of 2016.

In addition to the institutional support to PGS through the NCOF-facilitated PGS network, the Indian government introduced various financial assistance schemes for the promotion of PGS. One of them is the PKVY scheme (EUR 55 million allocated for a 3-year period starting in 2016) that promotes organic farming through an organic village cluster approach and PGS certification. In August 2016, the government also opened a PGS shop inside the building of the Ministry of Agriculture in New Delhi, selling only PGS-certified products. The Ministry has also opened a café and hopes to add another 7-8 PGS shops in the coming year.

# Pitfalls and challenges

The main risk of government involvement in PGS support is that of having a top-down inflexible approach, which is rather contrary to the PGS concept. This risk can be mitigated through participation processes and an effort to delegate to and trust the power of grassroots organizations. Especially when PGS are recognized in an organic regulation, a certain level of formality is going to be inevitable in order for PGS to maintain official recognition. In the case of the government-run PGS program in India, the government, when setting up their PGS program, copied the PGS system that was already run by civil society organizations and there has been a lot of consultation on the government system (both nationally and even internationally whereby the advice of IFOAM-Organics international was requested). As a result, the government-run PGS has found broad support from civil society, even those that were involved in PGS prior to the government involvement. The two systems (civil society and governments) co-exist in good faith and are not considered by either party to be competing with one another.

Any nationally consolidated PGS system is also more prone to rigid procedures and inflexibilities than very localized systems, as they have to manage several (sometime quite heterogeneous) local/regional groups in a somewhat harmonized way. This is not a specificity of government-run or government-supported PGS system but any nationally consolidated system. However, when things are linked to government regulations, decrees and such official documents, they become less flexible for changes and local adaptation.

Government support to PGS might also face some internal resistance from the part of the organic sector that is purely third-party oriented and sees PGS as a competitor or as a threat to organic integrity. Typically those actors opposed to PGS development are third party certifiers, but it has become more and more common in the past 10 years to see third party certifiers acknowledging the power of PGS to promote organic growth and to deliver real organic integrity. In India, for example, some Indian 3<sup>rd</sup> party

certifiers are even cooperating with the government-run PGS program, as they see an opportunity to convert PGS farmers to third party certification at a later stage.

Finally, in the case of government-led PGS development project, a common problem is too much focus on the capacity building component and not enough (effective) engagement with the market (private sector), which does not lead to sustainability after the end of the project funding period. In some cases the government-led PGS initiatives try to set a shop or markets to sell PGS products but they lack the business experience and funding to keep the shop going beyond the establishment stage. It is therefore highly recommended that, when governments wish to engage in a PGS project, they do so in partnership and with significant (management) involvement of the local private organic sector representatives.



# **CHAPTER VI:**

REVIEW OF AGRICULTURE AND FOOD POLICIES THAT CAN HAVE NEGATIVE IMPACT ON ORGANIC DEVELOPMENT



The measures presented in this chapter are general agriculture and food policy measures that have shown a detrimental effect on organic development. Although policies in other sectors such as education, trade or health are not covered in this document, they may also have an impact on organic development.

A good comprehensive national strategy to develop organic agriculture should not only develop pro-organic policies and programs, but also mitigate the negative effects of policies and programs that are harmful to the organic sector. This could be done either by cancelling or reducing the importance of the negative measure (e.g. stopping subsidies on chemical fertilizers) or by providing a compensation scheme that balances it with a disincentive for organic alternatives (e.g. subsidizing equally the use of organic fertilizers). This chapter presents only a quick overview of such harmful measures and cases where such measures have been mitigated or even reversed.

It is essential that organic policy development consider the broader policy framework as that could negate efforts to develop the organic sector. To review the overall policies affecting the agriculture sector is therefore an essential part of organic policy development. That said, it might be much more difficult to change overall policies, than to introduce specific organic measures.

# 1. Subsidies on chemical fertilizers or synthetic pesticides

Many countries subsidize agricultural inputs, and particularly fertilizers, in an attempt to increase agricultural production. When the structure of the subsidy program is such that only commercial chemical fertilizers are subsidized and organic commercial fertilizers and on-farm produced fertilizers are not, the policy environment works against organic agriculture. Similarly, when the country applies reduced value-added tax (VAT) for commercial fertilizers and pesticides, this works as a quasi subsidization of conventional agriculture, at the expense of organic agriculture.

It is therefore crucial that, in a comprehensive strategy to promote organic agriculture, the issue of subsidies for conventional inputs is considered, and ideally reversed. This has been successfully done in a few countries, either in a deliberate attempt to promote organic agriculture (e.g. Bali) or simply as part of a strategy to decrease the use of toxic and environmentally damaging substances in agriculture (e.g. Scandinavian countries).

Generally, there is a positive global trend (especially in developed countries) towards phasing out subsidies (or reduced VAT) for pesticides and fertilizers, and to shift towards the opposite policy instruments, namely taxes on synthetic pesticides and fertilizers and/or preferential fiscal treatment of organic fertilizers and biopesticides.

In the EU, a few countries (especially Poland, Portugal, Slovenia, Cyprus and Spain) still apply reduced VAT for pesticides but the EU Commission is advocating that those countries reexamine those policies in order to help achieve the objectives of reducing pesticide use in the EU. Other EU countries are more advanced towards sustainable

policies, such as France and Italy, which apply a lower VAT to organically approved pesticides compared to conventional pesticides (respectively 10% against 20% in France and 4% against 22% in Italy).

A few European countries introduced taxes on nitrogen fertilizers as early as 1976. 1985 and 1986 for Finland, Sweden and Austria respectively, with rates of taxation varying from 10% to 72% of the fertilizer price. A study from 2001<sup>72</sup> evaluated the impact of such tax packages and concluded that the greatest impact (reduction of negative externalities caused by use of nitrogen fertilizers) is obtained when the tax system is combined with other policy instruments (advice, incentives and regulations) and when the revenue raised through the taxes is being reinvested solely to promote sustainable alternatives. Other European countries joined the trend of chemical fertilizer taxation in the following decade, but the history of fertilizer taxation in Europe is overall quite complex. There is a wide variety of approaches and several countries. after having implemented such programs for several years, are led by EU policy and court decisions to abolish or modify them. In general, in the EU, the national fertilizer control policies are now being dealt within the framework of the EC Nitrate Directive (91/676/EEC), which applies equally to all member states. Nevertheless, there remain disparities, for example in the VAT levels for fertilizers. Italy, Germany, France and Austria apply reduced VAT to organic fertilizers compared to chemical ones.

In other developed regions of the world, the trend is also to phase out subsidies on chemical fertilizers. South Korea abolished subsidies to chemical fertilizers in 2005 and is now subsidizing the use of organic fertilizers and soil conditioners. Other countries such as Australia, New Zealand or the US do not subsidize fertilizers.

In the developing world, the fertilizer subsidy situation is still mostly unfavorable to organic agriculture, with many/most countries (especially in Africa, Latin America and India) still subsidizing chemical fertilizers (and not subsidizing organic fertilizers), or exempting them from import taxes. However, things are beginning to change, and sometimes rapidly. A case in point is the history of fertilizer subsidies in the province of **Bali in Indonesia**. In 2009, the Bali government started a stepwise approach to annually reduce subsidies to conventional fertilizers and started, in parallel, to subsidize organic fertilizers with an annual amount of EUR 69.7 million. The budget allocated to the subsidy for organic fertilizers was gradually increased every year (EUR 278.9 million in 2013, EUR 697.2 million in 2014) and the government altogether stopped subsidizing chemical fertilizers in 2012. Hence Bali has successfully transitioned from a system subsidizing only chemical fertilizers to a system subsidizing only organic fertilizers within the course of three years. The State of Sikkim, in India underwent a somewhat comparable process, having progressively phased out subsidies on chemical fertilizers from 2003 to 2008 and having a deliberate policy to convert the State's agriculture to organic. Sri Lanka, in the context of its Toxin Free Nation Program (see below) also embarked on an ambitious plan to phase out the use of chemical fertilizers in the country in a step-by-step process that starts in 2016 by subsidizing

<sup>&</sup>lt;sup>72</sup> C. W. Rougoor, H. van Zeijts, M. F. Hofreither & S. Bäckman, Experiences with Fertilizer Taxes in Europe, Journal of Environmental Planning and Management, 44(6), 877–887, 2001

organic fertilizers to the same extent as chemical ones. In some countries like Nepal that still subsidize chemical fertilizers, there is a trend to revise existing policies in order to subsidize organic fertilizers as well. Nepal has been subsidizing companies to produce organic fertilizers since 2011 and in 2015 revised its fertilizer policy to subsidize both the establishment of organic fertilizer producing facilities, and to subsidize farmers' purchase of organic fertilizers.

With regard to pesticides, environmental taxes are also an effective measure to encourage the reduction of their use, as their price elasticity is relatively high. Herbicides seem to have the higher price elasticity, followed by fungicides and insecticides. Indeed, herbicides can easily be replaced by mechanical weed control measures if the farm economics so dictate. Similarly to fertilizers, studies have shown that the most effective pesticide reduction programs are those that combine tax measures with advice to farmers and regulation (e.g. stricter criteria to authorize pesticides, or mandatory farm-level record-keeping).

The three pioneer countries in terms of pesticide reduction programs are Sweden, Denmark and Norway, which adopted national action plans to reduce pesticide use as early as the late 1980s. Those plans included taxes on pesticides, levied on sales price or kilograms of active ingredient used. Taxes were paid directly by the agrochemical distributor or by importers (manufacturers are few). The pesticide reduction plans also included education, extension and research programs to promote good practices and alternatives to pesticides. In those three countries, the taxation system for pesticides has been continuously refined and improved over the past 30 years, offering a wealth of lessons learned on the topic. An important evolution has been the shift from ad valorem to banded<sup>73</sup> taxes, allowing for greater attention to the actual threat posed to the environment by various chemical compounds.

The set-up of an effective pesticide taxation system is quite a complex exercise, and there is much to learn from the experience of Scandinavian countries, France, Italy, or Mexico. Valuable overviews in this regard are the 2005 Briefing of Pesticides Action Network Europe on Pesticide Taxes-National Examples and Key Ingredients and the 2016 scientific paper European Pesticide Tax Schemes in Comparison: An Analysis of Experiences and Developments. Despite its complexity, it is a policy instrument worth using, and it can also bring substantial tax revenues to the state (e.g. in Denmark in 2013, pesticide tax revenues amounted to EUR 88.5 million), which can then be reinvested for organic agricultural development. For example, in the case of Italy, revenues from pesticide tax were earmarked to the fund for research on organic and quality agriculture. In Denmark and Sweden some revenues were also channeled to organic farming support.

 $<sup>^{73}</sup>$  Banded taxes differentiate products according to their hazards on human health and environment, according to some objective indicators.

## 2. Approval of pesticides imports and pesticide use

Mass pesticide spraying is one of the government decisions (together with GMO approval, see Chapter VI, section 7) that can have the single most sudden detrimental impact on a national organic sector.

A case in point is the story of DDT spraying to combat malaria in **Uganda** in 2008. That year, the Ugandan Ministry of Health took the decision to apply Dichlorodiphenyltrichloroethane (DDT) to control malaria on a large scale. Each house, in an entire region, received compulsory DDT spraying, and even though the spraying was indoor residual spray, the contamination impact on organic products that are stored in-house after the harvest was significant and expected to last many years after the spraying. Indeed, any detectable trace of DDT on organic products makes their certification invalid for their target market, namely the EU market. The 2008 compulsory spraying led to the permanent loss of organic certification status of more than 16,000 organic farms in Uganda, and had a serious and long-lasting impact on the Ugandan organic sector, as shown by the graph below:

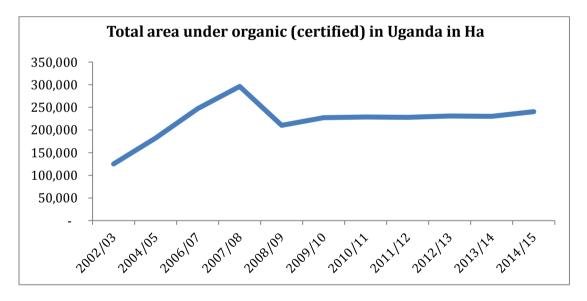


Fig. 10: Certified organic area in Uganda between 2002 and 2015 (Source: FibL and IFOAM)

Since 2008, the court battle has been ongoing between the Ugandan government and the opponents of DDT use (amongst which are the organic companies and the Uganda Network on Toxic-Free Malaria Control), so the future of DDT use in Uganda is uncertain.

Government-ordered aerial spraying of synthetic pesticides can also be a disaster scenario for organic farming. **Egypt** is an example of a country that had a chemically-intensive approach to pest management in cotton, whereby the government, starting in the 1950s, organized a program of intensive aerial spraying of chemical insecticides three to four times a season.

The government's approach changed radically in the early 1990s, after SEKEM, an organic company, demonstrated the effectiveness of organic pest control. The Egyptian Ministry of Agriculture sponsored further and more extensive tests. Within three years, the ministry agreed that organic pest suppression was superior for cotton farming and began converting nearly the entire area of Egyptian cotton, 4,000 square kilometers, to organic methods for controlling pests (including pheromones). Aerial spraying of pesticides on cotton became prohibited. The conversion took two years. It resulted in a reduction in the use of synthetic pesticides in cotton by 90 % and an increase in the average yield of raw cotton of 30%. In 1997, the government cancelled all conventional insecticides used to control the cotton leaf worm in vegetable and other crops, and several products were banned due to possible carcinogenesis. In the following years, the Ministry of Agriculture supported the mass production and use of a number of biological controls and biopesticides (including Trichogramma evanescens, Chrysopa vulgaris larvae and mites, Bioeanza, Protecto, Virotecto).

The best scenario to protect the organic farming sector from economically damaging contamination is an outright ban on the most problematic synthetic pesticides. This happened for DDT in most developed countries as early as in the 1970s and 1980s for agricultural use and was expanded to nearly worldwide after the Stockholm Convention had entered into force in 2004, although the chemical is still used in certain countries against mosquitos (like Uganda above).

The health impact of synthetic pesticides regularly comes to the spotlight and the concerned products are being banned in certain countries as a result. The latest product in the spotlight is the herbicide glyphosate, of which the first country to implement a complete ban on imports and use was Sri Lanka in June 2015. The decision followed the election of the new president, Maithripala Sirisena, a farmer and previously the country's Health Minister. Following the classification of glyphosate as a probable carcinogen by the WHO in 2015, other countries are following with partial bans and restrictions.

## 3. Unfavorable regulations on farm-made and organic fertilizers, plant protection products and farmers seeds

Governments undertaking a strategic plan for organic agriculture and markets should always undertake a review of current fertilizer and pesticide regulations and rectify any provisions that deter use of organic inputs. This includes any provision that would deter the on-farm preparation and use of organic inputs. In some developed countries with complex registration requirements, it is technically illegal for farmers to use any unregistered pesticide or fertilizer, even if it is biologically based and prepared on farm. Attention should also be placed on the legal requirements linked to the registration of crop varieties, as registration requirements can be too complex and unsuitable to the need of the organic sector.

Recognizing the danger of chemical pesticides on human health and the environment, and therefore the need to regulate their approval before they are placed on the market, many governments have developed stringent registration procedures for pesticides. Big agrochemical companies have no problems meeting those registration requirements. However, when the same requirements are applied to organic plant protection products that cannot be produced in the same scale, the registration costs can become a hindrance to wider adoption of organic agriculture. Similarly, when fertilizer-testing requirements (for heavy metal content or other toxic hazards) are also applied to animal manure coming from the farm or a neighboring farm, the regulation becomes an unaffordable burden. Also, when requirements for commercial fertilizers demand full exact labeling of nutrient content, this becomes unfeasible for composts and other natural origin fertilizers. Regulations should permit such fertilizers to give indicative figures based on average values (and labeled as such).

An example of an unfavorable legislative framework in this regard is the EU system, which has no differentiated legal provisions for non-chemical plant protection products: they currently fall under the same regulation as their synthetic counterparts. The data requirements are partly inappropriate or difficult to interpret for biopesticide active substances such as microorganisms. In general, the registration procedures described in Regulation (EC) No 1107/2009 are suited to synthetic substances, which are usually single molecules with high effectiveness against specific pests or diseases. Although specific guidance has been developed for several categories of naturally occurring substances including microorganisms, semiochemicals (pheromones) and botanicals (plant extracts), there are still some inadequacies that would, for example, incentivize purified single-compound botanicals, as opposed to more unrefined preparations. In general, the EU, compared to the USA, has higher costs and a slower approval system for organic plant production products to enter the market. Under current EU regulations. substances need to be first approved in the general legislation before they can be added to the organic regulation list. The process can take years, even if the product is already recognized as food (this is for example currently the case with sucrose as a plant protection substance – stuck in years of registration process).

Registration fees are usually high, but they not yet harmonized at EU level. In most EU Member States the fees for microbials (biopesticide products made of viruses, bacteria, nematodes and fungi, which are acceptable in organic production) are still much lower than the fees requested for the evaluation of chemical active substances, which somewhat limits the problem. Below are a few examples:

In **Denmark** the fees for the microbials accepted for biocontrol are half those required for the evaluation of chemical active substances  $(110.000 \in \text{versus } 220.000 \in)$ .

In the **UK** the fee for microbials is  $22,500 \, \pounds$ , whereas the fee for chemicals is  $110,000 \, \pounds$ . This follows a project launched in 2003 that aimed at encouraging the registration of alternative pest control products such as pheromones, plant extracts and biological organisms, with registration fee reduction being an essential component of the project. The success of this project led to the creation of a permanent Biopesticide Scheme in 2006.

In **Belgium**, a special procedure was launched in 2007 in the framework of the program for reduction of pesticides, in order to improve the availability of biopesticides on the market. The projects aims to give special consultancy for the applicant, a separate fast-track procedure for biopesticides, lower fees and improved communication. Fees for new active substances have been reduced from EUR 100,000 to EUR 10,000 for biopesticides and EUR 300 for national product authorization.

In 2016, the EU Commission launched an initiative to revise the EU Fertilizer regulation (EC) No 2003/2003, as well as to evaluate the regulation on plant protection products (EC) No 1107/2009 and to propose implementing measures regarding low-risk substances. In 2016 at the AGRI Council, the Agricultural Ministers of EU Member States have endorsed an implementation plan on the 'acceleration' of sustainable plant protection. There is therefore possibility of improvement in this policy area at the EU level in the coming years.

The **USA** has a bio-pesticide registration program similar to the approach of Belgium. The US Environmental Protection Agency (EPA) has a fast track, streamlined bio-pesticide registration program that is supported by the IR-4 program based at Rutgers University. IR-4 was started in 1982 and considerably expanded in 1994. IR-4 facilitates registration of sustainable pest management technology for specialty crops and minor uses. Working closely with and advising the EPA, IR-4 has completed 43 registration projects since 1994 at a cost of EUR 2.7 million, and also gives regulatory advice to manufacturers.

In **Switzerland**, the Swiss government (as part of the mandate/contract with the Federal Office for Agriculture) is one of the funders of the FiBL organic input review program (the program is also co-funded by organic stakeholders and applicant input companies).

In general, if governments require natural preparations to be registered, they should invest public money in supporting applications for naturally occurring substances because those are still of limited economic interest for the industry (due to the small size of the market and the limited possibility to obtain intellectual property rights). For example, which company would want to pay the registration fee for nettle-decoction to be used as a farm input? If nobody pays, nettle-decoction then becomes illegal to use. Separate and very simplified registration procedures should therefore be developed for well-known low-risk substances with high natural background (e.g. rock powders) and/or commonly used for other purposes (e.g. sodium bicarbonate, calcium hydroxide). Regulations should also take into account the fact that natural preparations or substances can have multiple uses (plant protection and fertilizer at the same time, for example).

**Brazil**, for example has made some legislative provisions to facilitate the registration of organic inputs. The 2003 law on organic agriculture specified that the inputs with regulated use for organic agriculture should be subject to a differentiated, simplified and streamlined registration process. Subsequently, several decrees and normative

instructions detailed the approval procedures for organic fertilizers and pesticides and exempted them from certain requirements applying to conventional inputs, such as the need for agronomic, toxicological and environmental studies, or the Temporary Special Registry and from registration of components. Farm-made products are exempted from registration. Under its 2013-2015 national plan for organic production, Brazil supported and facilitated the registration more than 50 different inputs for organic production through the financing and contracting of studies and tests for potential products and the development of reference for specifications, allowing for faster and cheaper registration of these products.

A similar concern applies to general legislation concerning seed marketing and crop variety registrations, which can be highly detrimental to organic farming. One characteristic of organic farming is that it should be site-specific and promote and take advantage of biodiversity. Hence, it is important for organic farming that farmers have access to a wide range of locally adapted plant varieties, including farmer-saved seeds and old and non-mainstream varieties. However, there are a number of general legislations related to seed use, seed exchange and seed marketing that restrict the possibilities for farmers to use such varieties.

The main problems with many general seed legislations are:

- Registration costs for varieties and certification costs for seeds are too high<sup>74</sup> and procedures too complex to enable small enterprises and farmers that maintain old and local varieties to register and certify them, and without registration they are often made illegal to sell. Therefore, registration requirements reduce biodiversity on the seed market and the variety choice, thereby reducing the chances for organic farmers to find varieties adapted to their local conditions.
- Among the technical requirements for registering a variety, it should be
  demonstrated that the variety is distinct, uniform and stable. Particularly the
  requirement of uniformity is difficult to meet for old and farmers' varieties that
  are more genetically diverse. Moreover, for varieties to be best suited to organic
  production, it is often desirable that they are less uniform in order to have higher
  adaptation and overall yield stability under stress conditions.

For example, according to the EU seed legislation, all seeds that are sold or exchanged need to be inscribed in national variety registers, and this means expensive tests. New varieties of agricultural crops in Europe must be tested for distinctability, uniformity and stability (DUS) and for their value for cultivation and use (VCU) before they can be accepted on the National List of Varieties and the Common European Catalogue of Varieties. VCU tests are carried out nationally to evaluate the local value for cultivation and use in the concerning member state. According to a 2010 study, some EU countries have no organic VCU testing at all and some of these have no organized organic variety trials either. In such cases farmers must rely on exclusively conventional tests for variety choice, while the ultimate "test" is in the farmer's organic field. Other countries supplement conventional tests with organic variety trials. Some countries have specific

 $<sup>^{74}</sup>$  E.g. the Dutch authorities estimated that costs of registration and seed certification amounted to around EUR 1,000 per variety in 2008.

organic VCU-tests (e.g. Denmark, Germany, Norway, Austria).

The application fees can cost a few hundred euros, to which one needs to add the variety testing fees and the maintenance fees. This can be a hindrance, especially when the fee for organic varieties is higher than for conventional varieties (e.g. in Denmark, where organic varieties have to pay for supplementary organic trials in addition to the conventional VCU testing, which adds up to EUR 3,900). The maintenance fees can be as high as EUR 900 per year (in Germany). On the other hand some countries have lower fees for organic varieties than for conventional varieties (e.g. Austria), which is certainly helping.

Some legislations exempt local and traditional varieties from cumbersome registration and testing requirements<sup>75</sup>. However, the multiplication of those so-called "conservation varieties" is limited to 0.3-0.5% (depending on crop) of the total seed market of the crop concerned or the amount needed to sow 100 hectares, whichever the greater quantity, which basically restricts their significant commercial use and doesn't make them viable options for most organic farmers. Moreover, only a few varieties (mostly vegetables) have been listed to date in a few EU member states.

The example of Brazil is more conducive to the promotion of local and traditional varieties: Article 12 of the law that establishes the national policy on organic agriculture or PNAPO (Decree Nº 7.794, 2012) introduces an important change to the Decree nº 5.153 of 2004 on the National System for Seeds and Seedlings. It relieves family farmers and traditional groups, as well as their cooperatives or association, from the obligation to register varieties in the national registry. This change has removed a previous obstacle to the right of farmers to keep and exchange seeds and is a proof of recognition of the important role played by family farmers and traditional communities in maintaining biodiversity through conservation and propagation of local varieties.

Some progress can be noted recently on legislation related to seed exchange. For example, in 2015 and 2016 the states of Minnesota, Nebraska, Illinoi and California passed laws that exempt non-commercial seed activities (such as seed exchange) from regulatory requirements. Since 2016 in Denmark seed exchange, since it is a non-commercial activity, is exempted from compliance with the EU regulations, meaning that all types of seeds can be exchanged and not just conservation varieties. The Danish legal interpretation also exempts the sale of non-commercial seeds (seeds intended for private gardeners) from compliance with the EU seed legislation.

In some countries, there are also regulations for compulsory seed treatments that are not compatible with organic standards and pose a problem to organic operators.

Guidelines for public support to OA – African version

 $<sup>^{75}</sup>$  such as the EU Commission Directive 2008/62/EC of 20 June 2008 and the Commission Directive 2009/145/EC of 26 November 2009.

## 4. Unfavorable agricultural risk management programs (crop failure compensation schemes, etc.)

Some countries manage a government-sponsored farm insurance program to help their farmers to cope with risks such as catastrophic weather. Other states give financial compensation (using calamities funds or ad-hoc aids) to farmers in cases of calamities or natural catastrophes, in order to save a particular sector. Such risk management programs are generally a positive thing for agriculture, including organic agriculture. However, some of those programs disadvantage organic farmers compared to conventional farmers, for example, by not taking into account that the market price for organic products is higher (applying the same price level to all farmers), or by focusing on a few commodities (when organic farms are more diverse). This is for example the case for the German system of compensation to farmers in case of outbreaks of animal diseases under the Animal Disease Act promulgated in 2001. A fixed amount is paid per animal dead or killed because of a notifiable disease. However, the same amount is paid whether the animal is conventional or organic, and even worse, for certain species (e.g. cows), intensive breeds get a higher compensation than extensive breeds, which disadvantages organic farmers.

The Kenya National Agricultural Insurance Program launched in 2016 is the largest government-sponsored agricultural insurance program in Africa and is one that is clearly unfavorable to organic farming. The program is a partnership between the government and the private sector, particularly the Syngenta Foundation with its own insurance company. The program is a package that ties crop insurance to input purchases and extension messages that promote the use of those inputs.

**USA** is an example of a country whose crop insurance program was disadvantaging organic farmers, but which has rectified it in recent years to make it fairer to organic farms. Until 2014, the crop insurance program managed by the USDA Risk Management Agency has paid for individual commodities, making it very complicated for diversified organic farms especially vegetable growers that might have 30-50 distinct crops. In addition, until 2012, the federal crop insurance charged an extra 5% surcharge for organic farms and then paid out in conventional farm prices, rather than organic prices.

In 2011, the USDA began offering crop insurance for organic producers, which reflects organic market prices. However, originally, only four crops had a recognized organic premium price under the program. In 2014, the USDA made new crop-insurance pricing options available to organic and transitioning producers, including those who grew crops under guaranteed contracts. This contract price option allows organic producers who receive a contract price for their crop to get a crop insurance guarantee that is more reflective of the actual value of their crop. By 2016, the USDA finally eliminated most inequalities with regard to the compensations. The Whole-Farm Revenue Protection insurance policy became available to producers. This policy allows producers to insure between 50 to 85 percent of their whole farm revenue. This makes application easier and more affordable for a diversified farm. The organic premium prices now apply to 57 crops, providing organic producers the opportunity to protect their crops at

organic market levels. The crop list contains a diversity of crop types, including vegetables and fruits that are grown in diverse plantings and rotations. In 2017 more crops will be added to the list, which is available online.

## 5. Allowance of GMO crops

One of the most detrimental general policies, for the organic sector, which a country can pass, is the allowance of a genetically engineered crop, particularly when this crop is also a significant organic export commodity for the country. Widespread GM contamination is a major factor in increased costs, loss of reputation, and loss of market for an organic supply chain.

A case in point in this regard is the story of allowance of Bt Cotton in **Burkina Faso** in 2008, which led to a collapse of the organic cotton sector in the country in 2009-2010 (in addition to being a commercial disaster for the country's conventional cotton sector). The damaged is being reversed now, with Burkina Faso cotton companies having declared the phasing out of GM cotton by 2018, but financial damages are estimated at EUR 205 million for the conventional sector alone. The national organic sector development suffered the worst setback of its history, which will have repercussions and missed opportunities for many years to come. Read more about the Burkina case study <a href="https://example.com/here">here</a>.

In order to protect their organic sector and as a response to general civil society concerns about GMOs, a growing number of national governments, regions and municipalities take a firm stand against GMO cultivation on their territories and/or sale of genetically modified seeds and foods. In 2010, in the EU, 169 regions, 123 provinces/departments, and 4713 local governments (municipalities and districts) passed decrees and resolutions to ban GMO cultivation from their territory, effectively becoming "GMO-free regions" Worldwide, by the end of 2015, 37 countries have officially banned the cultivation of GM crops. There are also many countries in which GMO cultivation is not banned but is currently not practiced yet. Even in countries that haven't banned GMO cultivation at the national level, some provinces and municipalities have banned it.

If GMOs are allowed and food that contains GMOs can be sold in the country, then compulsory GMO labeling provides the needed transparency to consumers and, by

<sup>&</sup>lt;sup>76</sup> Full list available at http://www.gmo-free-regions.org/fileadmin/files/gmo-free-regions/full\_list/List\_GMO-free\_regions\_Europe\_update\_September\_2010.pdf.

<sup>&</sup>lt;sup>77</sup> Those are: Algeria, Madagascar, Turkey, Kyrgyzstan, Bhutan, Saudi Arabia, Belize, Peru, Ecuador, Venezuela, UK (for Scotland, Wales, and Northern Ireland), Germany (partial opt-out in order to pursue more GMO research), France, The Netherlands, Malta, Cyprus, Greece, Bulgaria, Russia, Serbia, Croatia, Italy, Denmark, Hungary, Moldova, Latvia, Lithuania, Austria, Poland, Slovenia, Azerbaijan, Bosnia and Herzegovina, Luxembourg, Belgium (Wallonia region), Ukraine (although there is massive GM contamination in the country), Norway and Switzerland.

<sup>&</sup>lt;sup>78</sup> A good example is the Davao Municipality in The Philippines.

raising awareness about GMO presence in food, can incentivize consumers to choose organic products in order to avoid GMOs. Compulsory GMO labeling (above a certain threshold of GMO presence, usually at 0,9 or 1%) has been passed as a law/decree in 64 countries<sup>79</sup> (data from 2013). A very good overview map is available at <a href="http://www.centerforfoodsafety.org/files/cfs-ge-labeling-map-march-2013">http://www.centerforfoodsafety.org/files/cfs-ge-labeling-map-march-2013</a> 38812.pdf.

Also, in the absence of GMO culture prohibition (if that is not achievable in the given political context) there should at least be some GMO co-existence regulations, aiming at ensuring that non-GMO crops will stay uncontaminated, or at least show less than 0,9% contamination in order to meet the typical thresholds for labeling in most countries. Coexistence regulations can be of different nature, including ex-ante (preventive) coexistence regulations, which GM farmers must follow if they want to plant a GM crops, and ex-post coexistence regulations defining liabilities for contamination. Ex-ante coexistence regulations can include, for example, isolation distance (fixed minimum distance between GM and non-GM crop fields of the same specie, imposed on the GM growing farmer) or temporal isolation (differences in corn sowing dates or in maturity class used).

A good coexistence system for organic agriculture is one that will effectively prevent contamination by having strict ex-ante regulations as well as ex-post liabilities to ensure compensation of organic farmers if their crop becomes contaminated despite the exante regulation measures. One example of such system is **Portugal**, which has a comprehensive system of coexistence regulations (ex-ante and ex-post). The ex-post regulations include a GMO contamination compensation fund, whereby the Ministry of Agriculture and the companies that sell seeds have agreed to cover the cost of damages to neighboring fields. The seed supplier pays into the compensation fund at the rate of €4 per 80,000 seeds. In practice however, between 2007 and 2015, no requests by farmers for compensation have been made, and this can be attributed to the effectiveness of the strict ex-ante regulations which keep GM contamination values well below the 0,9 % EU legal threshold and overall extraordinarily low<sup>80</sup>.

<sup>&</sup>lt;sup>79</sup> Those are: Algeria, Madagascar, Turkey, Kyrgyzstan, Bhutan, Saudi Arabia, Belize, Peru, Ecuador, Venezuela, UK (for Scotland, Wales, and Northern Ireland), Germany (partial opt-out in order to pursue more GMO research), France, The Netherlands, Malta, Cyprus, Greece, Bulgaria, Russia, Serbia, Croatia, Italy, Denmark, Hungary, Moldova, Latvia, Lithuania, Austria, Poland, Slovenia, Azerbaijan, Bosnia and Herzegovina, Luxembourg, Belgium (Wallonia region), Ukraine (although there is massive GM contamination in the country), Norway and Switzerland.

 $<sup>^{80}</sup>$  Quedas and Carvalho, 2012 have found that adventitious presence was 0.1 and 0.5% in 70 and 97% of samples, respectively; and none was above 0.8%.

