



COMMITTEE ON WORLD FOOD SECURITY

Forty-fourth Session

"Making a Difference in Food Security and Nutrition"

Rome, Italy, 9-13 October 2017

**GOOD PRACTICES AND LESSON SHARING FOR IMPROVED
NUTRITION: INVESTMENTS FOR HEALTHY FOOD SYSTEMS**

I. SUMMARY CONCLUSIONS

1. The main policy-relevant findings recurring in all submissions, can be summarized as follows:
 - A holistic multisectoral approach to both policy and programmatic interventions is critical to move towards sustainable and healthy food systems. Processes, policies and investments aimed at healthy food systems need to be aligned across sectors and supported by strong political commitment and effective institutional arrangements.
 - To be effective, institutional arrangements and governance should comprise vertical and horizontal multi-sectoral and multi-stakeholder coordination mechanisms to ensure dialogue, coherence and joint action. They should reserve an important role for civil society to engage and hold governments to account as well as ensuring the participation and engagement of the private sector and all value chain actors as important investors and actors of transformation towards healthier and more sustainable food systems.
 - Building and mobilizing sufficient capacity and resources is needed in all sectors to formulate coherent policies and design, implement and monitor investments aimed at healthy food systems across sectors. Investments in human and institutional capacity are needed at all levels including for government authorities and other relevant actors to establish and participate meaningfully in multistakeholder platforms and each perform their agreed functions.

*This document can be accessed using the Quick Response Code on this page;
an FAO initiative to minimize its environmental impact and promote greener communications.
Other documents can be consulted at www.fao.org*



mu275

- As women play a central role in food systems, it is crucial to create the conditions for their strong engagement in shaping food systems that can ensure better nutrition.

II. BACKGROUND, OBJECTIVES AND METHODOLOGY

2. The Forty-third Session of the Committee on World Food Security (CFS) endorsed the strategy "CFS engagement in advancing nutrition", which proposes a vision and a framework for stepping up CFS contributions to the global fight against malnutrition in all its forms, building on and contributing to the operationalization of the Second International Conference on Nutrition (ICN2) policy recommendations, and in the framework of the UN Decade for Action on Nutrition (2016-2025), consistent with the CFS mandate.
3. The strategy foresees CFS work to advance global nutrition efforts along three interconnected and mutually reinforcing functions: policy convergence; lessons and good practice sharing; and tracking progress. Discussing lessons learned and sharing good practices among governments and stakeholders facing similar or related challenges can be an effective way to inspire national policy makers and other stakeholders to adopt, adapt and scale up successful practices that are country and context specific, by providing a better understanding of actual constraints and ways to address them. It is also conducive to greater accountability, and can help the Committee identify where there is a need for greater global policy convergence and coordination.
4. The CFS 44 good practice and lesson-sharing session on "Investment for healthy food systems" is a contribution to implementing the strategy "CFS engagement in advancing nutrition", which proposes lesson and good practice sharing activities on selected themes including through south-south and triangular exchanges, held through events organized during intersessional periods and during Plenary week on a biennial basis, starting in CFS 44.
5. Following consultations within the Open-ended Working Group (OEWG) on Nutrition, a global call for contributions to the lesson-sharing session was placed through the Global Forum on Food Security and Nutrition (FSN Forum). The call invited stakeholders to submit short summaries that identified lessons learned and good practices from investments promoting healthy food systems. It was open from 11 April 2017 to 19 May 2017 and received 34 examples covering 28 countries.
6. This document provides a compilation of selected examples that identify some key messages relating to investments for healthy food systems. It is the result of the following four-step process:
 - 1) Mapping of submissions received through the global call: Following an initial screening of the 34 submissions received, the FSN Forum Team in collaboration with the Technical Task Team assisting the CFS Secretariat mapped the examples following the typology of intervention proposed in a UNSCN discussion paper on Investment for Healthy Food Systems (Executive Summary)¹: i) Improving Value Chains; ii) Agricultural Interventions; iii) Governance and Institutions; iv) Infrastructure.
 - 2) Selection of investment examples: The mapping facilitated a preliminary selection of investment examples on the basis of relevance, taking into consideration the areas of focus identified in the global call: food system analysis; nutrition focus; inclusiveness and participatory approach of the investment; and lessons learned. The selection process also considered geographic coverage and diversity of proponents. Fourteen particularly relevant examples were selected to be summarized and included in this document (see the list at the end). The full submissions can be found on [the FSN Forum website](#).

¹ <https://www.unscn.org/en/resource-center/UNSCN-Publications?idnews=1278>

- 3) Analysis of examples and identification of key findings: A set of key findings was developed on the basis of the analysis of all the examples selected by typology of intervention.
- 4) Identification of policy implications: Drawing from the analysis of all the submissions received and key findings, a number of policy implications were identified, which can be informative for CFS.

III. POLICY IMPLICATIONS EMERGING FROM ALL SUBMISSIONS

7. This section takes into consideration examples received through all 34 submissions to the global call² beyond those summarized in this document, and presents the main policy messages that emerge beyond those already described above under Summary Conclusions

Holistic food systems approach

8. Most submissions point to the fact that effectively addressing hunger and malnutrition requires an approach that addresses society as a whole, a holistic approach to both policy and programmatic investments. Due to cross-border interlinkages and interdependencies among different parts of various food systems, comprehensive efforts aimed at both production and consumption will need to transcend national boundaries entailing regional and global approaches.

9. Adopting a food systems approach may help to engage all relevant sectors and comprehensively address the causes of nutritional problems. Many of the investments already involved multiple policy sectors and targeted different levels at the same time. In general, however, it seems that the food systems approach is not yet being systematically integrated in project design. For instance, investments in some cases were characterized by a value chain approach rather than a food systems approach, and some confusion between the two concepts still seems to persist.

10. Context-specific interventions are required with clear shared objectives. There is a substantial difference between long- and short-term investments, which have different characteristics and requirements when it comes to their design, implementation, funding and sustainability. Significant differences also exist between the characteristics and requirements of investments in contexts where people already enjoy food security, and those in contexts where the achievement of food security is still a major concern.

Coordination and coherence

11. As improving nutrition involves a wide array of sectors, coordination among the various relevant actors is indispensable for effective action. Strong political commitment is indispensable to this effect together with effective institutional arrangements. Processes, policies and investments need to be aligned.

12. A considerable number of submissions noted the lack of coordination also within governments on vision, goals and practical interventions. In some countries, separate funding streams exist for agriculture, health and nutrition, which are seen as independent of each other. For instance, interventions focusing on promoting productivity have not automatically been linked to local nutrition programmes; similarly, rural health services have often not been linked to food production support.

² The complete proceeding of the FSN Forum Call for examples and good practices on investments for healthy food systems can be found at www.fao.org/fsnforum/activities/open-calls/investments_healthy_food_systems

13. In order to promote policy convergence and effective policy implementation, horizontal coordination among different ministries and vertical coordination among government authorities at different administrative levels needs to be ensured. Establishing multistakeholder fora of dialogue for civil society actors, technical experts and government authorities may be key in supporting coordination in programme development, and may also allow for creating linkages among (existing) programmes to promote complementarities and synergies.

Institutional environment

14. Institutional arrangements and governance should allow an important role at all levels for civil society to engage and ensure accountability. The recognition of the central role of women in shaping food systems for healthy diets both through action at household and at production levels is an essential pre-condition for effective investments in food systems for nutrition objectives.

15. Institutional environments have not always been conducive to the implementation of nutrition interventions. Some submissions identified certain issues, such as physical remoteness from central decision-making processes and a lack of awareness among local authorities regarding nutritional problems among the population, which inhibit adequate and integrated responses to nutrition-related issues.

16. Some submissions also highlighted how national and regional agricultural policy frameworks often focus on conventional agriculture, and that there is still scope for fostering sustainable agricultural production methods. The interest of smallholders and the crucial role they play in sustainable production should be taken into closer consideration by policy-makers. Along these lines, some of the submissions mentioned the implementation of the principle of food sovereignty as a potential goal.

Capacity building

17. Many contributions emphasized the need for additional investment in capacity building in order to improve nutrition outcomes. Overall, investments in Research and Development are crucial for better understanding the trends and challenges in the different food systems, and are needed in order to design adequate nutrition-enhancing interventions as well as for their implementation and monitoring.

18. In order for decision-makers to undertake specific action, spaces should be created for intersectoral knowledge exchange among governmental and non-governmental actors. Capacity building also entails setting up and strengthening coordinating authorities at subnational levels in order to adequately implement decisions that are made at higher levels, and to simultaneously provide feedback regarding local experiences that could inform national policy-making processes.

19. At the level of the individual, people's capacities to understand and address the nature and causes of food security and nutrition-related issues should be strengthened in order to develop locally empowering solutions, taking into account the links between agriculture, health and nutrition. For example, the establishment of school gardens could constitute an investment that increases awareness about the importance of healthy diets.

20. With specific regard to capacity building for smallholders, farmer-to-farmer training is seen as key to scaling up knowledge gained in other contexts. Furthermore, producer cooperatives can have a role in promoting sustainable production for nutrition.

Partnerships

21. The submissions show that collaboration among different actors – public and private entities, as well as development and international organizations – has been a key driver for success.

22. Collaboration with the private sector is perceived to be essential, given its specific expertise in the field of food production and its role in building sustainable value chains that provide healthy food. Furthermore, partnerships between public and private entities are seen as important in conveying a consistent and uniform message to target audiences, in particular regarding what constitutes a healthy diet.

23. In some cases, stakeholders' differing interests have led to complications or delays in project implementation. However, complementarities in terms of resources like expertise and funding are of crucial importance for comprehensively and effectively addressing nutrition-related issues.

Funding

24. Adequate funding remains a likely constraint to effective investments for healthy food systems. While the majority of the investments were funded under public-private partnerships or by multiple donors, a substantial number however lacked (continuous) funding, thus constraining the implementation, sustainability or scaling up of their projects.

25. Combining and aligning resources – especially from the public and private sector – is crucial for improving the reach and impact of interventions. As an integrated and coordinated approach to nutrition implies the engagement of multiple actors in the project design phase, this may in turn allow for identifying different sources where financial resources are available.

Sustainability

26. Another recurring theme concerns the long-term viability of investments to promote nutrition, with two specific examples standing out. First, regarding initiatives that focus on sustainable production methods, the perception that these methods are more expensive than conventional methods has hampered the implementation of such practices. Second, project implementation and sustainability regarding the introduction of biofortified crops and fortified food products have been threatened by relatively high production costs (making the products less affordable), low demand, and competition from companies operating on a larger scale as well as those marketing “conventional” (i.e. popular) products.

27. Many submissions stressed that farmers should be provided with technical as well as financial support. One example showed for instance that engaging agricultural producers who adopt sustainable production practices or the cultivation of new crops in risk-sharing agreements can be essential for the success and sustainability of a project.

28. Most submissions stressed that market-based approaches and commercialization may be the best choice to sustainably foster healthy nutrition on a significant scale and to reach those most in need. To achieve these goals, the key strategies identified were: 1) providing (initial) support to compensate for eventually higher production costs; 2) investing in marketing and awareness raising on nutrition to build consumer trust and eventually increase demand for nutritious products; and 3) including nutritious products in public procurement and social protection programmes.

IV. FINDINGS AND SELECTED EXAMPLES BY TYPE OF INTERVENTION

A. Overall Findings

Importance of context

29. Locally contextualized interventions are needed to increase the efficiency and effectiveness of value chains, thus ensuring that improved availability and access of nutritious food translates into better nutritional status for the whole population.

30. Fortified complementary foods, especially when produced locally and adapted to local tastes and culture, can be an effective tool for addressing multiple forms of undernutrition.

Spaces for dialogue

31. The promotion of spaces for dialogue between civil society, producers and local authorities is key to establishing concrete actions and securing the attention and commitment of decision-makers.

Awareness raising and engagement

32. It is essential to raise awareness on the importance of the nutritional value of food, taking into consideration local conditions and preferences.

33. A lack of awareness by local authorities of nutritional problems and their effects on health and development can hamper the application of national programmes aimed at improving nutrition and can limit the impact of nutrition investments. In this context it is also important to ensure the coordination of different levels of governance, and the alignment and coherence of global, regional, national and local policies.

34. Farmers can be specifically engaged through farmer field schools, in order to raise their awareness of the need for nutritious food production as well as the uptake of sustainable production methods.

35. The involvement of institutions that have an impact on dietary patterns, such as schools and health facilities, can help raise awareness among consumers and women in particular, as they play a central role in food systems. Civil society organizations are crucial in shaping and carrying out effectively the awareness-building activities.

Market-based approach

36. From the producers' perspective, long-term sustainability of nutrition-sensitive investments will depend on generating the necessary demand through market-based approaches that better link producers with consumers.

37. Being the main food producer, the private sector plays a central role. Without viable market incentives, such as strong demand for certain nutritious foods, its continuous involvement will not be sustained.

To ensure poorer households both in urban and rural areas have access to nutritious food, the market-based approach can be complemented by social protection programmes, which can be efficient vehicles for food distribution.

EXAMPLE 1: Locally produced dietary supplements adapted to local tastes**Proponent: World Food Programme**

Pakistan faces substantial nutrition challenges, with increasing levels of stunting and wasting, significant maternal undernutrition, and low breastfeeding rates. In addition, it is experiencing a growing double burden of malnutrition. A key factor is the limited availability of and access to nutritious food.

To address malnutrition, the Government of Pakistan has prioritized the utilization of ready-to-use, lipid-based nutrient supplements (LNS), especially in crises. WFP has collaborated with local food manufacturers to develop a chickpea-based version of LNS, adapted to local taste that companies can produce locally. Currently, there are efforts to commercialize LNS involving the SUN Movement, retailers and the government, which may include LNS in social protection programmes.

Main lessons / key messages:

- Fortified complementary foods such as LNS are effective for addressing multiple forms of undernutrition among key vulnerable groups.
- Pakistan has shown that local private-sector food manufacturers are capable of adapting their production processes to increase availability of these particular foods. Partnering with the private sector has been a key success factor, but realistic expectations have to be set on demand and returns.

EXAMPLE 2: Operationalization of national policies to the local level through farmer field schools and spaces for dialogue

Proponent: FAO Bolivia

To promote adequate diets for all Bolivians, the government has already undertaken comprehensive efforts regarding policy-making and programme implementation aimed at improving food security and sovereignty.

With FAO Bolivia as the main entity responsible, this investment was based on the territorialization of public policies and on promoting sustainable and inclusive local food systems, for example by training farmers in agro-ecological production. The approach allowed national policies to reach the local level, linking agro-ecological and diversified food production to household consumption (vertical coordination), while also processing and commercializing surplus food through public procurement (horizontal coordination). A key component of the investment involved fostering forums of dialogue between civil society organizations, technical experts and local authorities.

Key actors

- Ministry of Rural Development and Land
- Ministry of Health
- Ministry of Education
- Cochabamba and Potosí Department Health Service
- Municipal Autonomous Government of Villazón, Tupiza, Pocona and Pojo
- Bartolina Sisa Organization of Indigenous Peasant Women
- Peasant Unions
- FAO, UNIDO and UNICEF

Main lessons / key messages

- In order for decision-makers to undertake specific action, it is essential to promote forums for dialogue among stakeholders.

This pilot aims to become a model for multisectoral collaboration at the local level, enabling the territorialization of public policies based on sustainable agrifood systems.

B. Summary Findings: Agricultural Interventions

Elements of agricultural interventions

38. Dietary diversity is a precondition for a healthy diet that satisfies the needs of children, women and men. It requires diversification of sustainable agriculture and processing, minimization of post-harvest losses, and the improvement of access to markets.

39. To design locally contextualized measures, there must be collaboration between authorities, producers, rural service providers and consumers.

40. To set up integrated approaches encompassing different food system actors, there must be sustained funding and a shared vision and goals among all actors involved.

41. Improved access to markets can increase farmers' incomes, thus enabling them to complement their family diets by purchasing other foods.

The role of agro-ecological practices

42. Some of the selected examples note that agro-ecological practices can improve farm resilience, productivity and sustainability as well as increase food diversity. Ecological diversification of farms could also ultimately help increase farm income, improve family health, protect natural resources, and increase resilience in the face of market fluctuations and climate change.

43. Some examples suggest that the prioritization of local food and seed production could empower farmers to develop sustainable nutrition-sensitive food systems. However, as conventional agriculture is presently the dominant form of food production, efforts to move towards a more localized, participatory approach could be met with some resistance.

Farmer-to-farmer training

44. Agricultural interventions can benefit particularly from farmer-to-farmer training and extension services. Inclusive knowledge platforms can help training and extension services in providing contextualized support to farmers and producers.

The role of school gardens

45. To stimulate demand for fresh produce in communities and increase the adoption of healthy meal plans in schools, there is also a need for continued nutrition education. In this context, the establishment of school gardens can provide an important entry point. In addition to providing nutritious food for school meals, the involvement of students, teachers and canteen staff alike in the production process can help raise awareness and establish healthy dietary habits.

EXAMPLE 3: Establishment of agro-ecology schools to promote farmer-to-farmer training and extension services**Proponent: Elizabeth Mpofu, Zimbabwe Smallholder Organic Farmers Forum (ZIMSOFF)**

In Zimbabwe, low agricultural productivity and farmers' lack of access to markets negatively affect food security and nutrition. Undernutrition and stunting rates are high, especially in rural areas where diets are insufficiently diverse and are poor in nutrients.

With local production and consumption as a priority, ZIMSOFF has been promoting food sovereignty, agro-ecology and the production of small grains. It has invested in farmer-to-farmer training, local seed multiplication and seed banking, as well as building storage and processing facilities.

Key actors

- ZIMSOFF cluster members organized into smallholder organizations at different levels
- ZIMSOFF local network members such as PELUM Zimbabwe, and regional members such as La Via Campesina
- Eastern and Southern African small-scale farmers
- Alliance for Food Sovereignty in Africa
- Third World Network and African Centre for Biodiversity
- Ministry of Agriculture
- Local extension services
- International organizations such as FAO, ActionAid International and Oxfam International

Main lessons / key messages

- National and regional policy-makers should support local farmer initiatives regarding food and nutrition by promoting agro-ecology, food sovereignty and the production of small grains.
- A policy on agro-ecology and food sovereignty is needed.
- Farmer-to-farmer training is the best form of extension and allows for scaling up knowledge.

Farmer initiatives in seed multiplication and seed banking should be scaled up, and climate-resilient seeds retained for future use.

EXAMPLE 4: Multistakeholder and participatory approaches to design and implement soil and water conservation practices**Proponent: Diana Sietz, Wageningen University, the Netherlands**

Smallholder farming systems in the drylands of Burkina Faso, Mali, the Niger and Nigeria face high levels of undernourishment due to limited productivity, land degradation, climatic variations, and the lack of an enabling institutional environment to improve nutrition.

Through a joint effort involving national governments, IFAD, the Nigerian Forestry Department, the National Agricultural Research Institute of Niger, the Maradi Integrated Development Project and the Aguié Desert Community Initiative, direct investments and food-for-work initiatives to improve soil and water conservation were implemented as a key strategy to improve food and nutrition security. The design and implementation of these conservation initiatives followed a participatory approach involving smallholders, NGOs, governments and international development agencies.

Main lessons / key messages

- The socio-ecological drivers of soil and water conservation need to be assessed, with particular attention to scale issues and critical thresholds.
- Farmers' management of resource variability in the context of soil and water conservation needs to be investigated.
- The key dynamics of soil and water conservation need to be understood, looking beyond static assessments of factors driving the uptake of particular practices.
- Diverse research methods should be integrated when determining the drivers of soil and water conservation. Besides Tobit models, configurational comparative methods should be explored.

EXAMPLE 5: Promoting agro-ecological practices, processing and minimization of post-harvest losses**Proponent: International Federation of Organic Agriculture Movements (IFOAM)**

Subsistence farmers in rural areas of Peru, Ethiopia, Kyrgyzstan, Pakistan and Nepal depend on diets of staple foods that are lacking in diversity. The groups most affected by micronutrient deficiencies are children and pregnant and lactating women.

This investment aims to improve the dietary diversity of rural communities in mountain regions through diversification of sustainable agriculture, processing of produce, minimization of post-harvest losses and improvements in market access. It has developed an online knowledge platform for rural service providers that allows for global knowledge sharing and advocacy efforts, national knowledge sharing with decision-makers, and support for local project implementation.

The main entities responsible are IFOAM, the Research Institute of Organic Agriculture (FiBL), Helvetas, and the Swiss Agency for Development and Cooperation (the latter being the donor agency). Other key actors involved are: Helvetas in Nepal, Helvetas Intercooperation in Pakistan, BioService in Kyrgyzstan, the International Institute for Sustainable Development in Ethiopia, and the IFOAM Latin America Office in Peru. The rural service providers implement the local projects.

Main lessons / key messages

- Good agro-ecological practices and ecological diversification can help protect natural resources, improve productivity and promote resilience in the face of market fluctuations and climate change.
- Processing of produce and minimization of post-harvest losses reduce seasonal shortages and improve productivity and nutrition all year round.
- Diversified mountain agro-ecology and consumption helps implement national strategies.
- The production and sale of a variety of nutritious products provides business opportunities.
- A revival of traditional food strengthens local culture and provides opportunities for marketing and tourism.

EXAMPLE 6: *Providing education on food hygiene, post-harvest handling of vegetables, and vegetable garden production techniques*

Proponent: Cargill

The Grain by Grain project in Brazil, implemented under Fundação Cargill, aims to address the lack of sufficiently nutritious food for school meals – perceived as a key vehicle for improving nutrition for children – as well as the lack of market access for local farmers. Although school gardens were initially established in combination with nutrition and agricultural education to provide fresh produce for school meals, the produce is now being procured from local smallholders.

This project, which has strong local ownership, involved a public-private partnership between local and global experts including Cargill employees, schools, the local government, teachers, canteen staff, parents, farmers and consumers.

Main lessons / key messages

- Continued education on nutrition and dietary diversity is needed to stimulate the demand for fresh produce in the community and to promote adoption of healthy meal plans in schools.
- Further improvements need to be made to increase farmers' knowledge of good agricultural practices and participation in the market.
- There is scope for connecting more producers to the federal incentive programmes PAA (Food Acquisition Programme) and PNAE (National School Food Programme).

C. Summary findings: Governance and institutions

Public information campaigns

46. Coherent communication campaigns are needed to increase consumer confidence in adopting healthier lifestyles and thus to facilitate the emergence of sustainable value chains for nutritious products. In this context, effective community mapping and behavioural research is critical to identifying the factors involved in influencing positive behaviour change.

47. Public places such as cafeterias, schools and hospitals also need to be involved in these campaigns, as they can play an important role in facilitating the adoption of healthier food.

Vertical coordination: from national to subregional

48. Different policy interventions have been designed to complement nutrition education and awareness-raising campaigns. Implementing policies effectively may require the addition of subregional coordination layers, thus creating greater ownership and facilitating project implementation and monitoring.

49. The right to adequate food can serve as an underlying guiding principle, a common thread to engage governments at different levels as duty bearers to ensure sustainable change and the availability of nutritious food at all levels.

Policies and voluntary agreements

50. Policies adopted to curb the consumption of unhealthy food include voluntary agreements with food producers to limit the concentration of certain ingredients, as well as compulsory labelling and taxes on food containing potentially harmful amounts of fat, sodium, sugar or calories.

51. The inequitable distribution of food within a certain society with high levels of malnutrition is often associated with high levels of gender inequality. In such situations, local leaders and district-

level authorities need to be engaged, as they play an important role in raising awareness and creating demand for intrahousehold dietary diversity.

52. To improve the odds that these policies and investments will be sustainable, it is important to tap into existing international frameworks and initiatives to access expertise and long-term funding.

EXAMPLE 7: Strengthening green public procurement and building territorial agreements between producers and consumers

Proponent: INNER – International Network of Eco-Regions

Italy is experiencing an ongoing nutrition transition that is increasing its rates of overweight and obesity, even in areas traditionally adherent to the Mediterranean diet.

With the Biodistrict Cilento Association in Ceraso Salerno as the main entity responsible, this investment aims to promote sustainable food systems and organic agricultural production in the National Park of Cilento, Vallo di Diano and Alburni. The main focus has been on consolidating local markets for organic produce, strengthening green public procurement and building territorial agreements between producers and consumers.

Key actors

- The Campania chapter of the Italian Association for Biological Agriculture (AIAB) and the Cilento National Park provided financial support during the setup of the Cilento Biodistrict.
- The Campania Regional Authority is responsible for the Integrated Territorial Development Plan and the provision of multiyear financial support for organic extension services.
- FOAM EU is the European umbrella organization, facilitating triangular exchanges for organic food and farming.

Main lessons / key messages

- Biodistricts facilitate funding strategies with a flexible structure, but also provide stable organization for territorial governance and the local economy, which is in line with the EU approach to local participatory development.
- Regarding value chain creation, alliances and networking are key for quality production that directly involves consumers.
- The recognition of biodistricts as wholesome areas of agro-ecosystem interest, as well as their promotion at national and regional institutional levels, can help enhance their establishment and development.

EXAMPLE 8: National dietary guidelines and salt-, fat- and caffeine-reduction campaigns**Proponent: Dr Al-Anoud Mohammed Al-Thani, Ministry of Public Health, Qatar**

Qatar is experiencing alarming rates of overweight, obesity and non-communicable diseases.

Listed below are guidelines and initiatives to promote healthy diets as developed by the actors indicated:

- Qatar Dietary Guidelines: Ministry of Public Health, Qatar Diabetes Association, Qatar Foundation, Sidra Medical and Research Centre, Qatar University, Hamad Medical Corporation, Aspetar Hospital, Weill Cornell Medical College, Qatar National Food Security Program, Primary Health Care Corporation;
- Food & Beverage Guidelines for Health Care Facilities: Ministry of Public Health, Hamad Medical Corporation, Primary Health Care Corporation, Qatar Armed Forces, Sidra, Qatar Patrol, Aspetar Hospital, Al Ahli Hospital, Al Emadi Hospital, Doha Clinic, vendors within the facilities;
- Food & Beverage Guidelines for Healthy Workplaces: Ministry of Public Health, governmental and non-governmental organizations, vendors within the facilities;
- Banning children's toys in fast food restaurants: Ministry of Public Health, Ministry of Economy and Commerce, Ministry of Municipality and Environment, all fast food restaurant chains in Qatar;
- Salt Reduction Initiative (bread): Ministry of Public Health, Central Food Lab, food industry (including the largest national bakery in Qatar);
- Trans-Fat Reduction Initiative (dairy products);
- Warning labels on energy drinks: Ministry of Public Health, Ministry of Economy and Commerce.

Main lessons / key messages

- The annual Qatar Dietary Guidelines campaigns and workshops help deliver a unified message for health care professionals, academia and the community.
- Regarding the Salt Reduction Initiative: Companies that have signed agreements under the initiative have encouraged other companies to reduce their sodium use.

EXAMPLE 9: Labelling and taxation of products to reduce salt, unsaturated fat and calorie consumption**Proponent: Ministry of Health, Chile**

Chile's food system is undergoing structural changes, with traditional foods being replaced by ultraprocessed products, contributing to significant increases in overweight, obesity and non-communicable diseases.

The Government of Chile, and particularly the Ministry of Health, has strongly invested in supply- and demand-side interventions for a healthy transformation of the food system:

- Laws and regulations for the labelling of food and beverages (i.e. their calorie, fat, sugar and sodium content) have been implemented.
- An 18 percent ad valorem tax to sugary drinks is being applied.
- The government and bakers have agreed on a voluntary target to reduce the salt content of bread.
- Two programmes, "Health Strategies, Municipalities, Communes and Communities" and "Healthy Life", support healthy lifestyles and environments while considering context-specific factors.

Key actors and stakeholders involved include Parliament, the Ministry of Health, the Ministry of Economy, the Ministry of Finance, the Ministry of Agriculture, the National Consumer Service, the National Television Council, Chile University, and the National Institute of Food Technology (INTA).

Main lessons / key messages

- There is a need to understand food patterns as social habits modelled on social determinants.
- Coordination between ministries and other actors is needed to change laws and promote health.
- Changing food environments is a key goal for improving public health.

EXAMPLE 10: Public health interventions to reduce salt, unsaturated fat and calorie content of products**Proponent: Ministry of Health, Welfare and Sports**

In the Netherlands, the main nutrition-related health problems are overweight, obesity and non-communicable diseases, which are largely due to unhealthy lifestyles and diets based on energy-dense, ultraprocessed food.

The National Agreement to Improve Product Composition 2014–2020 aims to reduce salt, saturated fats and sugars in food products. It has been signed by the Dutch Food Retail Organization (CBL), the Federation of the Dutch Food Industry (FNLI), the Royal Dutch Hotel and Catering Association (KHN), the Dutch Catering Association (Veneca), and the Ministry of Health, Welfare and Sports.

In the agreement, these parties state how they will jointly, but each of their own accord, achieve the objectives up through 2020.

Main lessons / key messages

In order to produce and offer healthier products, this approach must be part of an international (EU-wide, worldwide) challenge.

EXAMPLE 11: Voluntary agreement: "Shared objectives for improving the nutritional characteristics of food products, with a particular focus on children"**Proponent: Federalimentare – Italian Food and Drink Industry Federation**

While Italy has recently been named the healthiest country in the world, it is facing increasing levels of overweight and obesity (especially among children) and non-communicable diseases.

There has been strong collaboration between the public and private sector regarding the promotion of healthy diets:

- In 2015, Federalimentare signed a voluntary agreement with the Ministry of Health: "Shared objectives for improving the nutritional characteristics of food products, with a particular focus on children (3–12 years)".
- The "Commercial Communication Guidelines relating to food products and beverages, for the protection of children and their proper nutrition" have also been formulated.
- In 2016, Federalimentare renewed its partnership with the Ministry of Education, signing an official agreement for the triennium 2016–2019.

Main lessons / key messages

- Prevention and treatment requires a consistent and coordinated approach that covers all social groups.
- Nutrition education, combined with adequate physical activity, is the only way to address overweight and obesity.
- Responsiveness on the part of the food industry is essential.
- Adequately addressing overweight and obesity requires cross-cutting, multisectoral interventions, with close cooperation between health authorities and the food industry.

EXAMPLE 12: Improving food and nutrition security through the adoption of agrobiodiversity and dietary diversity at the intrahousehold level**Proponent: Marlene Heeb, Federal Department of Foreign Affairs, Switzerland**

Although the food systems of Uganda and Zambia are considerably different, both countries experience high rates of malnutrition and stunting. In Uganda, the lack of dietary diversity is mainly caused by the growing pressure on farming households to sell nutritious produce for cash. In Zambia, the main factors are low agricultural productivity and diversification.

The main entity responsible for this investment, the Swiss Agency for Development and Cooperation, has addressed malnutrition by promoting agrobiodiversity and dietary diversity at the intrahousehold level. The project anchored its work in local and national structures to ensure sustainable change and scalability to the national level. The investment focused on: 1) capacity building among local leaders and district-level service providers; 2) behavioural change; 3) diversifying supply and making nutritious products affordable and available; and 4) strengthening national multisectoral governance capacity through establishing and/or strengthening district-level nutrition coordination committees.

Key actors

National partners:

- SUN Focal Point of the governments of Zambia and Uganda
- District Nutrition Coordinating Committees
- Health and agricultural service providers (village health teams, extension services, etc.)

International partners:

- Netherlands Development Organization (SNV)
- CDI, Wageningen University
- Royal Tropical Institute (KIT)

Main lessons / key messages

- Increasing governance capacity and knowledge at the local level has proved to be most effective for improving nutrition outcomes.
- Creating multistakeholder partnerships (Nutrition Coordinating Committees) at the lowest governance level possible (subdistrict vs district level) is crucial for ownership and successful service provision to improve nutrition.
- Triggering approaches have proved very successful in sparking behaviour change, challenging communities to critically look at production systems, consumption patterns, diets, nutrition and hygiene. The approaches also make them realize how malnutrition affects their children, and that locally solutions are available and feasible.

D. Summary Findings: Infrastructure

Infrastructure needs to be sustainable and involve multiple actors

53. To avoid the risks of building unsustainable infrastructure that remains dependent on donor money and does not cater to the specific needs of the local population, it is imperative to carry out sound assessments of local needs and conditions.

54. Infrastructure building projects are complex: they require the concerted participation of multiple actors, which needs to be well planned and coordinated. For most food infrastructure investments, developing public-private partnerships is key to building sustainable value chains that prioritize local production.

55. Farmers participating in the newly established value chains can use the increased income to secure more nutritious diets for their families by purchasing food in markets.

56. To ensure the sustainability of the investment over time, working conditions in the newly created value chains need to be attractive; otherwise, newly-trained staff may leave for other employment after the inception phase.

Examples of infrastructure investments

57. Linking smallholder farmers to food processors and providing the necessary knowledge transfer constitutes an investment that can have multiple, positive and sustainable impacts on the nutritional status of the local community.

58. Small-scale infrastructure projects, such as building kitchens in schools, can also be instrumental in allowing more systemic interventions (such as school feeding programmes) to achieve their desired outcomes.

EXAMPLE 13: Helping customers in developing countries get access to locally produced, better quality milk

Proponent: Tetra Laval Food for Development Office

Bangladesh is encountering increasing demand for milk and dairy products, for which it depends on imports. In response to the 2008 food crisis, when prices of globally traded milk more than doubled, the Dairy Hub Model was developed by Tetra Pak and its Food Development Office with Tetra Pak's sister company, DeLaval. With PRAN Dairy in Bangladesh as the main entity responsible, this investment has focused on connecting local dairy farmers and processors and investing in local infrastructure to establish a more stable supply chain, improving the availability of milk and making it affordable to people with low incomes.

Other key actors are the Swedish International Development Cooperation Agency, UNIDO, and the Ministry of Fisheries and Livestock.

Main lessons / key messages

- Smallholders can be effectively integrated into formal industrial value chains.
- Project results and impact must be carefully monitored, in this case on a “per cow and per farm” basis.
- Project feasibility should be demonstrated by the private sector first, and donor funding should be used to scale up the project and increase outreach.

E. Summary Findings: Technology and R&D

Key messages emerging from the investment examples

59. The development and application of new technology, when supported by the necessary infrastructure and legal environment to facilitate the development of new value chains, can provide important opportunities to improve nutritional status and ensure healthy diets.

Biofortification

60. Some submissions mentioned that biofortification can constitute a potentially self-sustainable intervention capable of eliminating certain micronutrient deficiencies. Biofortification can be particularly beneficial if it targets crops already present in the existing food system, in which case it would not alter dietary habits or established practices.

61. To facilitate the adoption of fortified varieties by farmers, it is necessary to build up functioning value chains through public-private partnerships; to provide initial financial incentives and risk-reducing arrangements; and to work within a long enough time horizon, with sustained engagement over several years, to overcome short-term market challenges such as pricing or risk aversion.

EXAMPLE 14: Tackling hidden hunger through biofortification using conventionally bred vitamin A maize

Proponent: HarvestPlus

Micronutrient malnutrition severely affects people in Zambia, Zimbabwe, Nigeria, the United Republic of Tanzania, and Malawi. Maize, the most important staple food, is mostly grown under rainfed conditions, and the use of improved seed and fertilizer is not widespread. The maize value chain is complex, and prices are a politically sensitive issue.

HarvestPlus has invested in building a sustainable value chain for vitamin A maize by developing public-private partnerships. The investment involves: 1) developing efficient seed systems and new lines of Vitamin A Maize varieties; 2) advocacy to integrate VAM into the farm input subsidy programme; and 3) providing seeds to agrodealers at subsidized prices and contracting outgrowers to procure VAM grain.

Key actors:

- Ministries of Health, Agriculture and Education, as well as NISIR in Zambia
- NGOs such as World Vision International, ProfitPlus, United States Peace Corps, GIZ, SUNFund, NFNC, ZARI
- CGIAR centres such as WorldFish, IITA, CIP, CIMMYT
- International organizations such as WFP
- Zamseed, Seedco

Main lessons / key messages

- Risk-sharing arrangements with companies taking up VAM can be essential for success, but an exit strategy should be established to manage expectations.
- Building and maintaining a unique brand for VAM is the key to successful delivery and scaling-up strategies.
- Sustained engagement over several years can help overcome short-term market challenges, for example related to pricing or risk aversion.
- Regional crop release mechanisms are important for encouraging upscaling

V. TABLE: SELECTED SUBMISSIONS

Type of investment	Focus countries	Region	Proponent	Proponent's constituency
Value chains				
EXAMPLE 1: Locally produced dietary supplements adapted to local tastes	Pakistan	Asia	WFP, Government of Pakistan	International organization, Member State
EXAMPLE 2: Operationalization of national policies to the local level through farmer field schools and spaces for dialogue	Bolivia (Plurinational State of)	LAC	FAO Bolivia	International organization
Agricultural interventions				
EXAMPLE 3: Establishment of agro-ecology schools to promote farmer-to-farmer training and extension services	Zimbabwe	Africa	Zimbabwe Smallholder Organic Farmers Forum	Civil society
EXAMPLE 4: Multistakeholder and participatory approaches to design and implement soil and water conservation practices	Burkina Faso, Mali, Niger, Nigeria	Africa	Wageningen University	Academia
EXAMPLE 5: Promoting agro-ecological practices, processing and minimization of post-harvest losses	Peru, Ethiopia, Kyrgyzstan, Pakistan, Nepal	LAC, Africa, ECA, Asia	IFOAM	Civil society
EXAMPLE 6: Providing education on food hygiene, post-harvest handling of vegetables, and vegetable garden production techniques	Brazil	LAC	Cargill	Private sector
Governance and institutions				
EXAMPLE 7: Strengthening green public procurement and building territorial agreements between producers and consumers	Italy	Europe	International Network of Eco-Regions	Civil society, private sector
EXAMPLE 8: National dietary guidelines and salt-, fat- and caffeine-reduction campaigns	Qatar	NENA	Ministry of Public Health, Qatar	Member State
EXAMPLE 9: Labelling and taxation of products to reduce salt, unsaturated fat and calorie consumption	Chile	LAC	Ministry of Health, Chile	Member State
EXAMPLE 10: Public health interventions to reduce salt, unsaturated fat and calorie content of products	Netherlands	Europe	Ministry of Health, Welfare and Sports, Netherlands	Member State
EXAMPLE 11: Voluntary agreement: "Shared objectives for improving the nutritional characteristics of food products, with a particular focus on children"	Italy	Europe	Federalimentare	Private sector
EXAMPLE 12: Improving food and nutrition security through the adoption of agrobiodiversity and dietary diversity at the intrahousehold level	Zambia, Uganda	Africa	Federal Department of Foreign Affairs, Switzerland	Member State
Infrastructure				
EXAMPLE 13: Helping customers in developing countries get access to locally produced, better quality milk	Bangladesh	Asia	Tetra Laval	Private sector
Technology and R&D				
EXAMPLE 14: Tackling hidden hunger through biofortification using conventionally bred vitamin A maize	Zambia, Zimbabwe, Nigeria, United Republic of Tanzania, Malawi	Africa	HarvestPlus	Research institution

