

**SUMMARY OF A WORKSHOP SPONSORED BY IFAD AND ICARDA**

**13-15 MARCH 2007**

**The Role of Domestic and Export Marketing of Horticultural Commodities in Poverty Alleviation in the Near East and North Africa (NENA) Region**

**EXECUTIVE SUMMARY**

Governments and development organizations in the Near East and North Africa (NENA) region are keen to tap the market potential of horticultural products as a means of improving the livelihoods of smallholder farmers. To better understand the prospects for enabling the rural poor to benefit from growing horticultural markets, the International Center for Agricultural Research in the Dry Areas (ICARDA) and the International Fund for Agricultural Development (IFAD) organized an Expert Consultation Workshop on *The Role of Domestic and Export Marketing of Horticultural Commodities in Poverty Alleviation in the NENA Region*.

The workshop, held at ICARDA from 13-15 March 2007, benefited from the participation of over 35 experts and practitioners, representing National Agricultural Research and Extension Systems (NARES), universities and development organizations from Egypt, Jordan, Morocco, Syria, Tunisia and Turkey. It was structured around four themes: (1) assessing market potential and comparative advantage; (2) evaluating constraints; (3) examining success stories to draw lessons; and (4) identifying actions, programs and partnerships to promote smallholder production and marketing. There were 17 presentations and a series of theme-based discussion sessions. The workshop included a field trip to see pomegranate production and processing at a family farm; and olive and vegetable processing and international marketing, with the help of the Syrian Olive Research Department. In addition to IFAD and ICARDA, participation from international organizations included ARVDC – the World Vegetable Center; the French *Centre de Coopération Internationale en Recherche Agronomique pour le Développement* (CIRAD); the Food and Agriculture Organization (FAO); and the World Bank (WB). The workshop was opened by Dr Mona Bishay, Director of IFAD's NENA Division and Dr Mahmoud Solh, Director General of ICARDA.

**Findings and recommendations:**

The findings and recommendations stressed the importance of strengthening the collective bargaining of farming communities through access to technology, inputs, information, and markets. The specific recommendations focused on the following: supporting the development of member-driven farmers associations and HVC groups that can improve access to inputs, services and markets; using contract farming to strengthen partnerships along the value chain for managing quality and risks, and enhancing marketing capabilities; supporting rural financing institutions and micro-enterprise development that broaden investment opportunities for smallholder farmers and their partners; and seeking out public-private partnerships to assure holistic solutions that meet commercial and developmental objectives. Also it was recommended to strengthen the professional capacities of the NARES in the region through horticultural education, training and extension; and through linkages with the existing regional working groups (e.g. FAO Regional Working Group on Greenhouse Crop Production in the Mediterranean Region).



*'Expert Consultation Workshop on Horticulture', ICARDA, 13-15 March 2007.*

## **INTRODUCTION**

### **I. High value horticulture crops for poverty alleviation in the dry areas**

Horticulture contributes to livelihoods in dryland farming systems in the NENA region. Major species – many indigenous – are fruits and nuts (olive, grape, pomegranate, fig, almond, pistachio, walnut, dates, other stone fruits (plum, apricot and cherry), citrus and vegetables (beans, peas, cowpeas, garlic, onion, tomato, eggplant, pepper, melons, and cucumber). Many of these, as well as a number of HMAPs, have been farmed in the region for thousands of years. They provide income and diversification options and pathways out of poverty, with studies showing higher benefit/cost ratios for olive, almond, pistachio, mint, oregano, cumin, anise, and onion than for lentil, barley and wheat.

Consumption of vegetables and fruits is increasing at high rates due to a number of factors: population growth, income, growing urbanization, and the increased awareness of the health and nutritional value of fresh fruits and vegetables, particularly for organic horticultural commodities. External demand for horticultural products is also growing due to increased access by some countries in the region to the European Union (EU) and the Gulf Cooperation Council (GCC) markets. Capitalizing on their comparative advantage, some countries from the region like Tunisia and Morocco managed to obtain substantial preferential access and to receive a preferential entry price to selected EU agricultural markets under the Euro-Mediterranean Partnership.

Experience in several countries in Latin American, South East Asia, and Africa has shown the success of export-oriented strategies that centered on the promotion of horticultural exports in supporting economic growth and poverty reduction. There are also examples of smallholders being successfully integrated in the horticultural export supply chain in some countries from the region and elsewhere.

Horticultural commodities represent a particularly promising economic development opportunity for water-scarce and resource-poor smallholders in the NENA region, because of HVC's higher water use efficiency, relatively higher economic return per unit area, and the potential to add value through post-harvest processing and marketing. Many of these commodities and associated value chains are highly labor intensive; hence, are likely to contribute to solving rural unemployment problems. They would also help resolve the problems of low returns to water and

labor, increase household income and positively contribute to food and nutrition security and poverty reduction.

## II. Evolving partnership between IFAD and ICARDA

The collaboration between IFAD and ICARDA dates back to the inception for both organizations in 1977. Their activities have been intertwined ever since. ICARDA research funded by IFAD has helped resource-poor farmers to improve their livelihoods by augmenting their agricultural productivity and protecting the natural resource base in the dry areas. In addition, ICARDA provides technical backstopping to IFAD-supported investment projects. IFAD has not only supported ICARDA's research programs but also has contributed to the establishment of its infrastructure. In the 1980s, IFAD generously provided financial support to the main building at the Center's headquarters near Aleppo, Syria.

The IFAD/ICARDA partnership has been evolving over the years from supporting single commodity research (e.g. fava beans in the Nile Valley) to systems-oriented crop-livestock interactions (e.g. Mashreg and Maghreb Project) to the recent support of horticultural crops in the Arabian Peninsula (date palm project). Both organizations have strong operations in the NENA Region.

IFAD's mission is to enable poor rural people to overcome poverty using two instruments; loans (mostly on highly concessional terms) and grants, mainly to finance agricultural research and capacity building. In fulfilling its mission, IFAD works with rural poor people, governments, donors, [non-governmental organizations](#), the private sector and many other [partners](#). IFAD programs ensure that poor rural people have better access to – and have the skills and organisationans they need to take advantage of - :

- Natural resources, especially secure access to land and water, and and improved management and conservation practices;
- Improved agricultural technologies and effective production services
- A broad range of financial services
- Transparent and competitive markets for agricultural inputs and products
- Opportunities for rural off-farm employment and enterprise development
- Local and national policy and programming processes.

Total IFAD loan commitments in the region amount to US\$1.3 billion invested in 105 projects and programs in 15 countries (December 2006). The on-going NENA loan portfolio amounting to US\$500 million supports 31 agricultural and rural development operations. The on-going grant portfolio consists of 38 regional and country-specific research grants for a total of US\$26 million. IFAD is engaged in a number of activities for enhancing the livelihood of smallholder horticultural growers in their country programs. In addition to efforts made under numerous IFAD-supported projects to enhance access to arable land for horticulture, a number of initiatives have placed particular emphasis on marketing of horticultural commodities and on private sector partnerships. Examples include the: (1) West Nubaria Rural Development Project in Egypt that has established smallholder marketing associations and linked them successfully to an agro-food company for production of organic potatoes for exports; (2) projects in Syria, Palestine and Jordan addressing the quality of olive oil to meet market standards ; and (3) marketing of vegetables and citrus crops in Somaliland. IFAD's NENA division, in evaluating the effectiveness of its Regional Strategy, emphasized the importance of exploring opportunities to promote non-traditional crops as a means to enable the rural poor to generate higher income earnings.

ICARDA's mission is to improve the welfare of rural poor and alleviate poverty through research and training in dry areas of the developing world. ICARDA's approach is compatible with expansion of options for improving water-use efficiency and livelihoods for the poor. The work is both research and development oriented and produces knowledge and technologies which are widely applicable across countries sharing similar dry environments. ICARDA traditionally focuses on four commodities: wheat, barley, legumes and forage crops, but work on horticultural crops was envisaged at ICARDA's inception in the Skilbeck Report<sup>1</sup>. In this report it was stressed that , *“a shift to other high value cash crops such as fruits, vegetables or intensive forage/livestock systems, is required to justify the use of expensive water. In addition the irrigated areas offer the major possibility for developing agro-based industries and thus creating new job opportunities within and in relation to the agricultural sector”*.

Over the last 10 years, ICARDA has established programs on many of these crops in the Arabian Peninsula and North Africa, including protected vegetables in Yemen, mint in Morocco and Afghanistan, dates in the Gulf countries, olives in Syria, figs in Egypt and HMAPs in Tunisia, Jordan, Lebanon, Palestine and Syria.

A survey and study commissioned by ICARDA, published in 2004<sup>2</sup>, suggested the following key topic areas for high value crops as identified by stakeholders:

1. Water-use efficiency (rationalization of irrigation water utilization, irrigation practices, water saving strategies)
2. Harvesting issues (timing of harvests, using maturity indices, tools and equipment) for high quality and long shelf life
3. Temperature management (shade during harvest and handling, pre-cooling, cooling and cold storage, refrigerated transport)
4. Food safety issues (fresh handling, processing and marketing)
5. Cost and benefits of adopting new practices

The study recommended that crops common to dry areas and crops that have high economic potential listed below should be given the highest consideration, such as greenhouse vegetables (tomatoes, cucumbers, eggplant, hot and sweet peppers); field vegetable crops (faba beans, green beans, onions, garlic); fruit (dates, pomegranate, olives, figs, jujube); nuts (pistachios, almonds); fresh and dried culinary herbs (selected for the region); and HMAPs (selected for the region).

### **WORKSHOP OBJECTIVES**

The workshop reflected on present status and progress in domestic and export marketing of horticultural products and to inform and support strategic vision and directions in promoting these commodities in the NENA region. More specifically the regional workshop aimed to achieve the following objectives:

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<sup>1</sup> Skilbeck, D., G. Barbero, C. Bower, E.D. Carter, G.J. Koopman, I. Abu Sharr and G. van Poorten. 1973. Report of the Research Review Mission to the Near East and North Africa. CGIAR Technical Advisory Committee (TAC), Secretariat, FAO, Rome. 72 pp.

<sup>2</sup> Abou Hadid, A., K.H. Batanouny, A.S. Jabarine, A.A. Kader. 2004. Proposal for Expanding the Crop Mandate of ICARDA to Include Horticultural Crops. ICARDA, Aleppo, Syria. 54 pp.

1. To (a) elucidate the domestic and export potential of horticultural products (that can contribute to poverty reduction of smallholders) and (b) to identify countries with comparative advantage in the region;
2. To (a) identify and discuss opportunities and constraints/barriers in producing and exporting horticultural products and (b) propose solutions;
3. To examine some success stories, including types of partnerships, to derive lessons learned in the domestic and export marketing of horticultural products from countries within and outside the region; and
4. To identify actions, partnerships and programs necessary for promoting domestic and export marketing of horticultural products in the region.

The results of the workshop and consultation are summarized below, which should assist in setting the scene for further work.

## **SYNTHESIS OF RESULTS**

### **I. Assessing Market Potential and Comparative Advantage**

**Contributions to poverty reduction:** Several characteristics have been suggested by the participants as criterion for identifying (and targeting) horticultural commodities suitable for production by smallholder and have the potential to reduce rural poverty. These would necessarily respond to the comparative advantages of, and constraints faced by, the rural poor. In particular, horticultural crops that would favor the rural poor are labor-intensive with low entry costs, low up-front investments costs and low economies of scale; crops suitable for cultivation in rainfed or drylands systems where many of the poor are located; crops that have high water-use efficiency, that use drought tolerant varieties and that can be produced using already generated technologies and indeed crops that benefit from indigenous knowledge; and crops with high nutritional value that can be integrated into existing subsistence systems alongside traditional crops.

In NENA, it is likely that access to supplementary water, especially in the warmer dry season, will be necessary for farmers to successfully grow many horticultural crops. The focus for poorer farmers dependent on rainfall may necessarily be on indigenous tree crops adapted to dry conditions such as olives, figs, pomegranate, dates and grapes. A comprehensive description of potential opportunities and constraints for high value crops in each country is needed to inform all stakeholders.

**Potential for Value-Addition:** Horticultural crops produced by the poor use lower quantities of inputs and are safer, but require support in labeling, certification and marketability. The possibilities of drying products naturally or using improved technologies provides post-harvest methods (to preserve product value and create new products through differentiation e.g. chopped and dried vegetables and fruits) that are particularly relevant for remote locations that are not quickly and easily connected to markets, which also tend to have higher incidence of rural poverty. Similarly, crops that can be distinguished according to geographic labelling (“terroir”), have higher potential for value addition. Exploitation of these approaches in remote locations offers opportunities for poverty reduction.

**Premium for organic production:** Consumer demand for food safety provides a premium for organic production of fruits, vegetables and natural products. Although the terms "organic", "ecological" or "biological" have developed in Europe and North America to distinguish organic from conventional agriculture, many low-input traditional agriculture systems in other parts of the

world are also *de facto* organic systems. The advantages for NENA countries are obvious because of the prevalence of virgin lands not yet treated with any chemicals or manufactured fertilizers. However the costs of introducing certifiable organic agriculture relative to the returns may be high, and needs to be further assessed. To unlock the potential, governments must put in place simple procedures and testing to prove the land is certifiably “organic.” Examples of organic agriculture are widespread in the region, including both food and fiber, such as organic cotton production in Syria.

***Domestic and regional markets:*** Participants felt that domestic and regional markets were largely under-exploited. This applies specifically to indigenous produce that could be better managed and organized throughout the chain of production and marketing. Nowhere is this more obvious than in the traditional “wet” markets where very high losses take place due to poor physical handling and lack of attention to temperature control. These crops are often well adapted to farming systems and possess high water use efficiency combined with short crop life cycles to avoid late-season drought. Already sold in local *souks*, many of these domestic products could easily expand or reach new consumers in supermarkets and tourist hotels though creative, attractive labeling and marketing.

***Vicinity to and source of products for important markets:*** Out of season fruits and vegetables have a market niche in the EU and Russia. The GCC is a good market destination for summer crops and high quality products. The USA, Japan and Australia are fueling the growing global international market for dried products and spices.

## II. Evaluating Constraints and Solutions

***National policies and institutional actions:*** NARES institutional actions and donor-sponsored projects in the countries of NENA are by and large fragmented – rarely aggregating to address a more integrated objective that impacts poverty. Holistic nationally-led strategies are needed to harness the role and comparative advantage of each partner to contribute within a national framework – thereby assuring continuity and course-correction in the long-term to achieve a desired developmental goal.

### ***Expanding high value crop inventories:***

In supporting increased horticultural production and marketing, supply and demand must be evaluated to ensure over-supply does not deflate returns. Continuity of supply, perishability and quality are major issues, especially with fruit and vegetables, and systems need to be in place or developed to ensure quantity and quality are both maintained through the marketing chain. Many of these issues can be addressed with better organization, management and teamwork.

***Need for information, communication technology and knowledge management:*** In addition to price information, adequate description of all aspects of production and marketing chains can determine what works and what doesn't – allowing stakeholders to discuss the problem, propose solutions and divide responsibilities to profitably link farmers to markets.

***Traceability:*** Systems for quality standards such as Euro-Retailer Produce Association Good Agriculture Practices (EurepGap) aim to increase consumer confidence by establishing criteria for food safety and traceability. The norms also address some environmental practices (e.g. integrated pest management) and prerequisites to protect workers' health. EurepGAP is also aimed at harmonization of requirements for food hygiene and for Maximum Residue Limits (MRLs) for pesticides in food. This harmonization effort has only partly been successful,

considering that not all retailers are involved and that the standards refer to existing governmental regulations, which are not the same across Europe.

An international public good would be to disentangle and harmonize this multiplicity of standards. The current situation adds considerably to costs because no single standard is universally acceptable, forcing a duplication of certification. Standards that are too stringent can also be misused or perceived to be used for protectionist purposes.

**Analytical services and capabilities:** Whether for testing of soils for organic certification, examining products for MRLs or for routine soil or plant testing for optimum fertilizer application, there is much room for improvement in provision of services. Training is greatly needed, both to educate a new generation of technicians and to build adequate national capacity for public servants already working in the horticulture sector.

### III. Examining Success Stories to Draw Lessons

Several success stories for smallholder horticultural commodities from the NENA region were presented including specific cases from Morocco, Tunisia, Egypt, Yemen and Turkey. Key factors for success in integrating smallholder horticultural growers into markets include: enabling macro-economic and trade policy environment; demand-driven strategies based on market opportunity and eventual export potential; appropriate institutional and regulatory set up; effective producer and marketing associations; skilled management along the entire supply chain; availability of horticulture education, training and extension; product differentiation and market segmentation; and strategic planning and government support. Lessons learned include: the need for establishing private-public partnerships and also partnerships between growers, unions of producers and exporters; supporting entrepreneurial “champions” and replicating successes to ensure economies of scale; developing strategies and regulatory mechanisms for accessing different markets, including domestic, EU and GCC; ensuring good long-term planning capabilities at national, local, and at grower levels; developing national standards for good agricultural practice certifications; and ensuring GAP certification can be accessed, domestically or regionally, at reasonable cost.

### **POTENTIAL HIGH VALUE CROPS DISCUSSED IN THE WORKSHOP**

<i>Country</i>	<i>High Value Crops</i>
Morocco	Tomatoes, Strawberries, Cantaloupe, Banana
Tunisia	Dates, Pomegranates, Olives, Potatoes, Tomatoes, Apples, Grapes
Egypt	Broad Beans, Green Beans, Okra, Figs
WBG	Strawberries, Eggplant, Bell Pepper, Citrus, Ornamental Plants, Cut Flowers
Iraq	Dates
Jordan	Tomatoes, Eggplants, Peppers, Charentais Melon, Okra, Green Beans, Strawberries, Dates, Chili Peppers Herbs, Medicinal and Aromatic Plants
Syria	Olives and Olive Oil, Pears, Apples, Plums, Apricots, Pistachios
Turkey	Pistachios, Almonds, Fresh Fruits (e.g. Grapes, Figs, Cherries, Apricots)
Iraq	Dates
Iran	Dates, Pistachios

Several workshop sessions were devoted to discuss these success stories among which:

- i. Liberalization of the export sector coupled with policy and institutional reforms, significant investments in modern date plantations, and an aggressive marketing strategy have led to the emergence of a multitude of smallholder exporters and steady increase in successful exports of the Deglet Nour variety of Tunisia -- occupying first place among imported date varieties to the EU.
- ii. Building on the highly integrated structure of the tomato export sector and appropriate policy and institutional capacity, Morocco exploits its comparative advantage to increase its winter tomato export from 99,000 tons in 1986 to 200,460 tons in 2002. Presently Morocco produces less than 0.9% of the world total production of tomatoes but contributes 5% toward the total export market.
- iii. Building on a successful partnership among various institutions (donors, NGOs, and government institutions), the increasing efforts of the project entitled "Enhanced Livelihoods from Smallholder Horticultural Activities Managed Sustainably" in Upper Egypt have contributed to dynamic growth in the total number of farmers involved in export-oriented horticultural production and in the amount of land they are cultivating for export. The volume of high-value horticultural sales from Upper Egypt has almost doubled and the value realized by farmers has more than doubled when compared with results before the project.
- iv. Olive (*Olea europaea* L.) cultivation began in Syria around 3000 BC and spread to all Mediterranean basin. Olives are the direct or indirect source of income (production, processing, storage, transportation and exporting of olives and olive oil) for about 25% of the Syrian population. Production of olives has a major role in arid and semi-arid areas; providing labor opportunities and inputs for industries, which helps to reduce migration to urban areas. In the recent decades, olive oil has earned hard currency as an export commodity for Syria; however, weak government policies, large production variability, price fluctuations and limited capacity of all actors along the value chain have limited growth of the industry. Many of the constraints could be fairly easily overcome with a concerted and organized effort with strengthening of producer unions, introduction of technology for testing and better handling for top quality and differentiated product lines. Government policies are starting to change and a good market is close by in Europe.
- v. The workshop brought to light the significant comparative advantage of Turkey in contract farming for vegetables, fruit, cut flowers and potatoes. It would be a good strategy to incorporate the lessons learned into any project design as it would develop the private sector linkage and co-financing. Companies contract small farmers to produce raw material for canning, pickling, drying, deep-freezing and minimal processing of vegetables (tomatoes, pepper, beans, pea, okra, artichoke, cucumber (pickling), eggplant, cauliflower, carrot, brussel sprouts, mushroom, squash, broad bean, broccoli, onion, spinach, asparagus and leek).
- vi. New market channels demand exacting quality and standardization, which also requires high levels of labor – pushing agribusinesses into zones with low labor costs. Increasingly, entire areas will convert to a specialized adapted crop reflecting the areas comparative advantage - to capture economies of scale, concentrate production and to simplify transport logistics. This is happening in specialized production areas of Tunisia where whole villages are growing special varieties with a particular market niche, exploiting the rich biodiversity of numerous high value crops in the region.

#### **IV. Identifying Actions, Programs and Partnerships to Promote Smallholder Production and Marketing**

**Build associations:** High value crop associations are recommended to organize farmers into geographic clusters that can aggregate products and provide collective bargaining. The NENA region faces a huge challenge in developing a new model that differs from politically oriented cooperatives prevalent throughout the region. Without member-driven self-help associations that can sidestep these old structures and bad habits, the future will not lead to success in the HVC sector.

**Support micro-enterprise development:** It was clear that complementary non-farm rural activities should be supported to develop commodity value chains and market access, and to diversify rural income sources- including activities such as dairy farming, tree-cropping, agro-processing, marketing of agricultural inputs and commodities, establishing small-scale repair shops, manufacturing, etc. Support for micro-enterprise development would need to be coupled with support to self-sufficient and sustainable community-based rural financial institutions.

**Prioritize horticultural education, training and extension:** Horticulture is very knowledge intensive and dynamic. Short-term growth and long-term viability are critically dependent on access to technical knowledge, the ability to adapt that knowledge to local conditions and the flexibility to develop new production systems as market conditions change. Lack of human, institutional, and research capacity inhibits innovation, technology adoption, and the development of solutions to address key constraints. The development of participatory methodologies and effective education and extension networks, involving public, private, and civic sector collaboration, will strengthen the technical capacity of horticultural producers and improve the efficiency of current production and marketing systems.

**Address key policies:** Examples of important policy considerations include regulatory systems for horticultural standards; clarification and application of intellectual property rights agreements; secure land tenure and credit markets for small producers and agribusinesses; water use systems; and post-harvest and food safety protocols.

**Public-private partnerships (PPP):** PPPs further research and development objectives by combining public resources and capabilities of other prominent actors such as the private sector, NGOs and Community Based Organizations (CBOs). NGOs and CBOs can help build farmer associations to teach good agricultural practices and aggregate product from groups of farmers; public money can be used to build roads or training centers; and private actors (using diverse formal or informal arrangements) develop market relationships with farmers, provide services and inputs, purchase quality products, manage market risks and use their marketing expertise to guide these goods through domestic and international channels. Certification mechanisms require cooperation between public regulations and private service provision.

#### **RECOMMENDATIONS AND NEXT STEPS**

Most of the actions listed in the previous section relate to adjustments that could be considered in ongoing operations, or integrated into new projects. More specific strategic actions and next steps are elaborated below:

**1. Assess the Supply Chain:** A deeper assessment of critical constraints along commodity supply chains, and opportunities to add value is needed for key commodities. IFAD funds

ICARDA to undertake commodity chain analysis for selected vegetables and fruits with comparative advantages and potentials to benefit the smallholder farmers in the NENA region. Case study analyses will be carried out in Egypt and Morocco. The study is expected to give strategic directions for government and private sector support to the sector, to inform and guide investment opportunities and project development possibilities, and to support policy dialogue for improving the sector.

**2. Create a HVC Group:** It was suggested to develop a HVC Group including a network of experts to follow next steps. This group will also liaise with selected “shareholders”: farmer representatives, NARES, NGOs, CBOs, private sector and IARCs to share information and provide the nuclei for research and organization of developmental issues within communities. The shareholder group can gather information to share, compare and analyze how similar issues are treated in each country to create standardized approaches. It can prioritize issues of greatest concern, such as evaluation of market trends in individual countries, regionally and globally. Such a group could also inform discussion, for example, on how to provide GAP certification at reasonable cost, using labs at national or regional level. Volunteerism can be tapped for rewriting the guidelines for safe, sustainable and responsible horticulture by the stakeholders themselves, to fully reflect local concerns while still being compatible with external market realities. Establishment of the group will be led by ICARDA(?).

**3. Link to the FAO Regional Working Group on Greenhouse Crop Production in the Mediterranean Region:** Technical subgroups are already responding to major thematic challenges/areas of work such as irrigation, fertigation and soil-less culture; greenhouse design, covering materials and climate control; integrated production and protection management; production economics, quality requirements and crop diversification, including organic horticulture.

**Key collaborative actions agreed at the workshop:**

- The International Society of Horticultural Science (ISHS) is keen to collaborate on publication of the workshop proceedings.
- A strategy document will be produced, based on the workshop deliberations, on opportunities for horticultural development in the NENA region.
- A NENA Horticulture Group will be formed, with the participation of NARES, ICARDA, IFAD, CIRAD, ISHS, FAO, WB, the World Vegetable Center and Bioversity International.