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Islamic Chamber of Commerce, Industry & Agriculture
La Chambre Islamique de Commerce, d'Industrie et d'Agriculture



Statistical, Economic & Social
Research and Training Centre
for Islamic Countries



Food and Agriculture
Organization



Perez-Guerrero Trust Fund (PGTF) /
United Nations Development Programme
(UNDP)

Final Report on the
Workshop on Capacity Building on Value Chain
Analysis for Agribusiness for OIC Countries
1-3 December 2014, Ankara – Turkey

Preamble:

The Islamic Chamber of Commerce, Industry & Agriculture (ICCIA) is an affiliated Institution of the Organization of Islamic Cooperation (OIC) and represents the private sector of 57 Member Islamic Countries. It aims at strengthening closer collaboration in the field of trade, commerce, information technology, banking, promotion of investment opportunities and joint ventures in the Member countries.

The ICCIA has been undertaking activities in line with its objective by holding the various events in Member OIC Countries such as: Workshops, Training Programs on Capacity Building, Poverty Alleviation, Upgrading Marketing and Managing Skills, Value-addition, Food Security and Agriculture, Gender Development, Economic Empowerment of Women, Promotion & Development of Small & Medium Enterprises, Utilization of Microfinance, Developing Entrepreneurship, particularly in Women and the Youth.

Economies of the majority of the OIC Countries are largely agro-based. But overall, the performance of agriculture sector in OIC countries is not very promising. While agricultural development has long been supply oriented, its future will be more market driven. Further the development pattern varies considerably from one region to the other. South Asian countries are more advanced in developing a competitive agriculture, whereas Africa and Central Asian Republics lack behind in modern day practices to develop a well-functioning supply chain for commodities that carry good comparative advantage.

Workshop on Capacity Building on Value Chain Analysis for Agribusiness for OIC Countries, 1-3 December 2014, Ankara - Turkey

In order to implement the activities coming within the priority areas of the OIC Programme of Action, the OIC Institutions, share their experiences and expertise to add more value to the activity. In this context, Islamic Chamber of Commerce, Industry and Agriculture (ICCIA) has organized a Workshop on Capacity Building on Value Chain Analysis for Agri-Business for OIC Countries in Ankara-Turkey from 1st to 3rd December 2014.

The said Workshop was organized in collaboration with the Perez-Guerrero Trust Fund (PGTF)/United Nations Development Programme (UNDP), Food and Agriculture Organization (FAO) and Statistical, Economic & Social Research and Training Centre for Islamic Countries (SESRIC).

The Workshop was attended by 42 participants from 16 Countries, representing all regions of the OIC, namely Arab, Africa, Central Asia and South-East Asia. The participating countries were from Bangladesh, Indonesia, Iran, Jordan, Kazakhstan, Lebanon, Libya, Pakistan, Palestine, Nigeria, Saudi Arabia, Sudan, Tajikistan, Tunisia, Uganda & Turkey. In addition, representatives of Food and Agriculture Organization (FAO) Standing Committee for Economic & Commercial Cooperation of OIC Countries (COMCEC) and Statistical, Economic & Social Research and Training Centre for Islamic Countries (SESRIC) were also participated.

Objectives of the Workshop:

The objective of the Workshop was to promote exchange of experiences and discussion of best practices among primary producers and small-to-medium scale entrepreneurs engaged in first, second and third level agro-processing activities that provide value chain concept to the farmers, create off-farm employment, help stabilize local markets, improve hygienic standards for marketed products and/or facilitate market access. The main focus was given on value-chain, agro-processing Farm-to-Fork spectrum activities that can be carried out using relatively simple technologies.

Opening Session:

The Workshop opened with a recitation from the Holy Quran.

Mrs. Attiya Nawazish Ali, Assistant Secretary General of the Islamic Chamber of Commerce, Industry and Agriculture (ICCIA), in her address; welcomed all the participants on behalf of the President of Islamic Chamber and highlighted the significance of this important Workshop. She also thanked the Director General of SESRIC and all personnel of SESRIC for their continuous support to the ICCIA and its activities. She also extended profuse thanks to the Perez-Guerrero Trust Fund (PGTF) / United Nations Development Programme (UNDP) for their generous support and also to the Food and Agriculture Organization (FAO). She stated that Workshops such as this on “Capacity Building on Value Chain Analysis for Agribusiness for OIC Countries”, would be instrumental in creating awareness of the existing potentials in

Agribusiness and value chain analysis in OIC Countries. She further underlined the significance of all the joint efforts that are pursued collectively by the OIC Institutions, which eventually would further contribute to the realization of the overall objectives of the OIC Program of Action. She concluded by wishing the participants success in their deliberation of the Workshop and to come up with practical and doable recommendations that would enlighten the policy makers and shed light on the substantial issues and concerns of the stakeholders .

In his Opening Statement **Prof. Dr. Savaş Alpaya**, Director General of Statistical, Economic & Social Research and Training Centre for Islamic Countries (SESRIC) expressed his appreciation and thanks to all the participants for attending this important workshop. He said that in most of the OIC countries, agriculture production and the supply of agricultural products, mainly food products, did not keep pace with the rapidly increasing demand for food due to the rapid increase in their populations. This has led to a widening food gap to be filled by imports. In this respect, the development of a competitive agribusiness in OIC Member Countries is crucial for promoting productivity of natural resources, as well as enhancing intra-OIC agricultural trade through standardization and generating credit, technology and market access for OIC products. He emphasized the need of such Workshop on “Capacity Building on Value Chain Analysis for Agribusiness for OIC Countries”, which will promote exchange of experiences and discussion of best practices among primary producers and small-to-medium scale entrepreneurs and enable participants to gain valuable background knowledge on the best practices, so that they can apply them and obtain improved end results in their respective business. He also spoke about Modern agriculture sector that help reduce poverty, secure food sufficiency, provide additional job opportunities and promote other sectors of the economy.

In her opening statement **Ms. Yuriko Shoji**, Sub-Regional Coordinator for Central Asia and FAO Representative to Turkey said that this is the second such workshop hosted by ICCIA and its partners, the last one held in Kampala, Uganda in 2011 on food security and agribusiness for OIC Countries, and to which FAO/RNE lent its technical support by sending experts. She said that the content and outcomes of the workshop are closely tied to three major areas of FAO’s work in the RNE region. For one, there is the Regional Initiative on “Building Resilience for enhanced Food Security and Nutrition”, which aims to support NENA countries in eradicating hunger and malnutrition in the Region through improved governance and building resilient food security and nutrition institutions, markets and production systems. Secondly, is the Regional initiative for “Sustainable Small-Scale Agriculture for Inclusive Development”, which endeavors to stimulate rural development and support the needs of the rural poor. Finally, there is FAO’s work on food losses and waste reduction, including a member-country-endorsed Regional Strategic Framework, as a means towards strengthened food security and sustainable food systems.

Technical Sessions:

The first technical presentation was made by Dr. Mahmood Ahmad on **Value Chain Approach: Developing a Competitive and Sustainable Value Chains**, highlighted the importance of Competitiveness, Agribusiness and Value Addition. Through interactive participation the issues and their solutions at production, post-harvest, marketing, processing and retail levels were discussed. The identified lessons were that value chain approach is more appropriate to achieving sector or commodity competitiveness, further the competitiveness of the individual agro-food business depends upon the entire value chain to which it belongs. To achieve greater impact, there is need to link small farmers and SMEs to the market which can best be achieved through groups or cooperatives that have advantages over individual producers in participating in modern value chain. The farmer and enterprise organizations need to analyze the value chain and make strategic choices where and how to intervene.

Mr. Mazhar Hussain, Senior Researcher, SESRIC - OIC Ankara Centre made presentation on **“State of Agro-food Industry in OIC Member Countries”**. As a group, OIC Member Countries are well-endowed with agricultural resources such as arable land, water and human resources, and 31 of them are ranked among the top-20 producers of major agriculture commodities in the world. Yet, this inherent potential does not manifest itself in the form of reasonable level of self-sufficiency in meeting local food demand and eradication of undernourishment. Development of agro-food industry could play a pivotal role in increasing the food supplies, decreasing the dependence on imports and employment generation especially in rural areas across the agriculture-based developing countries including many OIC member countries. Generally, the scarcity of data precludes a comprehensive analysis of role and importance of agro-food industry in OIC member. Nevertheless, the results based on data available for 25 member countries reveal that on average these countries have higher shares in three major indicators of agro-food industries compared to the averages of non-OIC countries, indicating higher importance of the sector for these economies. The highest discrepancy between OIC and non-OIC countries exists in the share of agro-food industry in total output, total employment and wages. On the other hand, OIC countries are lagging behind their developing counterparts in terms of value addition and number of enterprises operating in this sector. Overall, this analysis confirms that the agro-food industries remain as one of the most efficient economic sectors in some OIC member countries that promote the productivity growth and development. And there is a need for appropriate measure aligned with global norms and standards to promote the competitiveness of the agro-food industry in OIC countries.

Mr. Mohammad Anisur Rahman, Chief Operating Officer, PRAN Dairy Limited, Bangladesh presented a Case Study on **“Dairy Value Chain : Case of Bangladesh”**. PRAN is one of the largest agro-based food processing companies in Bangladesh. PRAN Dairy is a sister concern of PRAN Group and the second largest dairy processor in the country. PRAN collect raw milk from the farmers through dairy hub system and process to various liquid and other forms of milk. The company has state of the art pasteurized, UHT and powder processing plant. PRAN collect raw milk directly from its contract farmers through dairy hub system and presently collecting & processing about 200,000 liters of milk per day. So far the company has reached to a total 9,000 dairy farmer directly through 47 village milk collection centers (VMCC) and another 22,000

farmers through 63 VMCC through collection agents. Some of the key successes of the dairy hub system are:

- Monthly average net income per farmer has increased from USD 99.66 to USD 236 (137% increase in monthly income).
- There are a total of 550 women dairy farmers are engaged at the dairy hub.
- A total of 746 dairy farmers are now having dairy production as their primary source of income compared with 139 farmers by the end of 2011.
- Total plate count (TPC) has decreased from 7,2 million to less than 3,5 million or -51 %
- Somatic cell count (SCC) has decreased from 350,000 to less than 280,000 or -20%
- There are 292 bio-gas plants set-up by the progressive farmers

To support Dairy Hubs, PRAN has set up a training institute, the Dairy Academy, where much needed training are provided for farmers and experts who are involved in developing local small holder milk production. 312 persons were trained in Dairy Academy, off the 48 were women participants. PRAN Dairy Hubs and Dairy Academy has employed 187 staffs and officers, off them 15 (8%) are women. The Dairy Academy is supposed to enhance the knowledge of milk production and quality conservation of raw milk.

Ms. Jennifer Smolak, Junior Agro-Industries Officer, FAO Regional Office for the Near East and North Africa made presentation on “**Food Security in NENA: Food losses in the supply chain and options for reduction**” Food security is a challenge in the region, with most countries already relying on imports, and will continue to be challenged due to structural and dynamic factors related to demographic changes, natural resources scarcity and climate change. Despite the challenges to food security, the region loses or wastes food to the rate of over 200kg/capita per year. Rates of food losses and waste reach up to 30% of cereals, 55% of fruits and vegetables, over 23% of meat, and 20% of dairy (to name a few commodities). The economic cost exceeds \$60 Billion USD per year. Therefore, food losses and waste have a detrimental effect on food security and food systems more generally. The good news is that all efforts to reduce food losses and waste will enhance food security as well as strengthen value chains and food systems; through mechanisms of greater efficiency, better use of natural resources, and agriculture-driven economic growth. Strategic directions towards reducing food losses and waste, based on the specific conditions of the NENA region, are fourfold: data gathering, analytical research and knowledge generation; policies, regulations and strengthening collaboration and coordination; awareness raising, promoting good practices; and, promoting investment and engaging the private sector for solutions.

The presentation on **Horticulture Value Chain** by Dr. Mahmood Ahmad was to review and compare the performance of Turkey, Pakistan and Egypt in the horticulture, also a Mango Case Study from Pakistan was presented. Through analytical work it was highlighted that all three countries carry tremendous comparative advantage in producing of fruits and vegetables. This advantage is derived from good agro- climatic condition, low labour cost and increased availability of skilled labour, proximity to Europe and Gulf markets. This potential can be further realized provided this comparative advantage can be translated into competitive advantage. This

can be achieved with better policy environments, post-harvest handling and in developing a feasible cold chains. The mango case study was presented to focus these issues in detail. The proposed actions included creation of certified nurseries, promotion of "top working", developing solar tube wells, and adopting modern irrigation. It also proposed interventions in marketing, processing and exports through creating market linkages, developing packing sheds, cold chains and mango treatment facilities. There was interactive discussion especially on issue of small farmers and developing a cost effective chain.

A Presentation on **Food Safety: “Added Value” to the Value Chain – Example From Agri-Food Sector Lebanon** was delivered by Ms. Dima Faour-Klingbeil, Founder/Certified Trainer, Accredited Food Safety Training Centre-Lebanon. As produce is transported from the farm to the market place, and finally to the consumer’s fork, it is subjected to a range of handling, processing and storage conditions at each step of the food chain; hence there are numerous opportunities for contamination and the contemporary global agri-food value chain can quickly spreads the risks worldwide. Food safety violations or failures at any points of the food chain may have a devastating impact economically and on the health bills (consumers and the state). Indeed, the microbiological indicators of our case study showed that samples of raw vegetables along the chain pose risks on consumers’ health and would not fulfill the requirements for added value products. Therefore, for developing a sustainable food value chain, it is highly recommended to underpin the food safety culture within the value chain framework through risk-reduction strategies, adoption of standards and the reinforcement of commitment of all stakeholders by on-going educational interventions taking into account the social, economic and cultural factors that constrain behavioral changes.

A joint presentation made by Dr. Mahmood Ahmad and Maria Ahmad on the topic of **OIC Agriculture: Inter and intra-trade of OIC**. On inter-trade, it was shown with data and figures that OIC Countries continues to perform below par despite the efforts to harmonize trade regulations and increase trade volumes. The most important trading partner for OIC is Europe. The performance of intra-trade among OIC counties has also performed marginally, though have improved during recent years. Trade among OIC Member States recovered after 2010 economic crisis. The gap between exports and imports has grown since exports experienced a decline in 2012 and 2013 the total value of intra exports of agricultural commodities in 2013 is almost five times of what it was in 2007. Arab region had the highest share in intra- OIC exports and imports. Overall the intra-regional trade in OIC is under developed and unexploited. Poor marketing infrastructure, non-tariff barriers, closing intra-border trading especially for food security purposes results in low volume and value of trade among OIC countries. The workshop participants expressed the need to disseminate the flow of information on inter and intra trade among OI C member counties.

Mr. Mehmet FIDAN, Expert from COMCEC Coordination Office made a presentation on **“Facilitating Smallholder Farmers’ Market Access in the OIC Member Countries”**. He briefed the audience on the new features of the COMCEC Strategy, which aimed at conceptual integrity and internal consistency as well as Member-driven work. He further highlighted the method of Working Groups that entails active and direct involvement of experts. He also talked about effective project cycle management, Project financing through grants by the CCO in such a manner that would not inflict financial burden on the Member Countries. He clarified in details

the Cross Cutting Lessons for OIC Member Countries that covers: Improving access to finance is important for linking smallholder farmers to markets, Transaction costs can be reduced by facilitating aggregation through producer organizations, associations, or cooperatives. He also said as part of its Growth Enhancement Scheme (GES) Nigeria has provided millions of small farmers Access to inputs through electronic vouchers (e-wallet).

The session on **Linking Small Farmers to Technology, Credit and Market** was presented by Dr. Mahmood Ahmad and supported by Maria Ahmed. The session highlighted that small farmers are caught in a vicious cycle of low appetitive for investment due to inherent risk in agriculture, resulting in low productivity and market orientation. The end result being that there is hardly any value addition and brings low returns to land and labour. Further, small farmers depend on middle man for access to these critical services in the absence of alternative options open to the farmer. The various business model of linking farmer/farmer group exist that include: Domestic trader (with or without external catalyst); Wholesaler; Retailer (direct or through wholesaler or agent) Exporter (with external catalyst or developed by participants themselves) and Ago-processor (initiated by the processor, with an external catalyst or facilitator or initiated by the government). Finally the session discussed the business models that are being used or proposed to address all important question of how small farmers can bypass the Mandi (Market Place) to get better price and income for their produce. Among many model such as Choupal (meeting place), Warehouse Receipt, Drumnet and Tameer Khushali (welfare) Bank were briefly evaluated and assessed their possible expansion to make an impact at scale. The participants agreed to take this topic further in future deliberation of value chain and agribusiness planned activities.

Dr. Salah Mohamed Alawad, Head Department of Agricultural Economics Faculty of Agriculture, University of Khartoum made a presentation on “**Agricultural Business Potential of Sudan: Implications for the Region**”. Agricultural Investment is the engine of utilization of the huge resource base which is abounds in Sudan. The potentials of agricultural investment could be revealed from many aspects such as diversity of climate, vast fertile land (70 million hector), huge renewable water (32.65 milliard cubic meters) and sufficient human resource. However, some challenges face agricultural investment, the most important ones are legal and institutional frameworks.

Presentation on **Opportunities for value chain development through better post-harvest handling practices: Regional experience and way forward** was delivered by Ms. Jennifer Smolak, Junior Agro-Industries Officer, FAO Regional Office for the Near East and North Africa. Three priorities will support the adoption of technologies and better post-handling practices: firstly, what is available in terms of existing technologies and procedures; secondly, determine what is needed and/or adapt existing technologies to the local conditions; finally, identify promising low-cost technologies that are easily accessed and financed, and encourage their adoption by making them widely known or somehow creating incentives.

The cold chain is the most important technology for preserving the quality and value of food, however it is seriously lacking in many developing countries and the NENA region due to many constraining factors, such as dominance of smallholder farmers and agribusiness, lack of enforcement of food safety standards, among others. Four policy recommendations are made to

highlight where focus is needed for cold chain development in the agro-food sector; educate, raise awareness, build technical capacity; stimulate investment in cold chain infrastructure, technology, practices; strengthen institutional capacity; and, support research and development.

The session on **Productivity and Diversification - using policy analysis matrix** was covered by Dr. Mahmood Ahmad. It was highlighted that developing a competitive agriculture sector largely depend on its productivity (value per unit of input), the factor is also instrumental to bring down the cost per unit of commodity produced so a farm or firm can be competitive. He provided an overview of land labour and water productivity in the OIC countries. Both land and labour is extremely low if we bench mark with other regions. However, the water productivity is relatively high in Arab region of OIC countries. The issue of virtual water provided an insight in developing a sustainable value chain. He presented data that to produce one ton wheat, fodder and dates, each crop consumes 1600 , 16000 and 24000 cubic meters of water respectively, showing how much water is embedded in producing a commodity, this type of data/information would be the determining factor in selecting a cropping pattern. He presented a number of cases where rationalization of water use is needed to save water not only for use present but the future generations to come. At the end he outlined the way forward by emphasizing that in future agriculture has to use less water to produce more and better quality food, the subsidy on water and energy is widespread and might not be sustainable for developing countries of OIC, there is need to incrementally move towards full cost pricing. Finally we need to think and plan differently in solving water and energy issues throughout the supply chain, investment in water and other infrastructure development would yield limited benefits unless we address the issues of farmer, especially small farmers market access.

Country Presentations:

The participants from, Iran, Kazakhstan, Tajikistan, Palestine, Kingdom of Saudi Arabia (KSA) Jordan, Libya Tunisia and Indonesia also presented country cases to highlight issues/constraints within different segments of the value chain and provided suggestions to develop or upgrade the supply chain.

The cases from Central Asia included Iran, Kazakhstan and Tajikistan. The delegate from **Iran** highlighted the Poultry Industry and its markets. Currently, broiler industry is undergoing structural shifts, towards a semi-integrated supply chain. About 50 integrators have been established and will hopefully be controlling the future of Iranian poultry industry, bringing quality products to Iranian consumers. The speaker from **Kazakhstan** presented a brief on six ecological zones that produce a diversified agriculture and as a major producer of wheat. Three value chain of rapeseed, Dairy and Beef were presented to high light constraints and needed actions, it was clear among others factors, high transportation cost is a major constraint. The case of **Tajikistan** highlighted the importance of export promotion in the supply chain, a case was made how export/ import trade regime is managed through holding exhibitions and trade fair and participation in business forums. The importance of cotton in earning foreign exchange was outlined.

In the Arab countries of OIC, Kingdom of Saudi Arabia (KSA), Jordan, Tunisia and Libya presented country cases. In **KSA** major agriculture reforms are being implanted that would impact the entire supply chain of strategic crops and livestock sub-sectors. The government policies are aimed at achieving sustainable agriculture by restructuring agricultural production. This is done by increasing production through comparative advantage and optimal use of the available resources (in particular water), with the aim of providing at least part of food needs of the growing population. Water productivity in agriculture would be key for directing future agriculture policies. At the same time, the Saudi government is committed to various international treaties, such as the WTO. Further the KSA case highlighted the role of private sector in developing a modern agriculture. The presentation from **Jordan** made a case that horticulture value chain has been developed to tap some of lucrative EU markets by exporting vegetables in winter that offers premium prices. However, political problems in Syria are hurting the sector due to elimination of traditional transport routes. The Value Chain Analysis for Small Ruminants Sector in **West Bank** – Hebron highlighted that there is very little controlled breeding management of sheep and goats by herders. However, there is clearly a bigger market for other dairy products including fresh milk, butter, cheese and other forms of yoghurt. Key issues are quality control including control of hygiene and infection, reliability and quantity of supply, transport and packaging.

In the North African and Africa countries of OIC, presentation from Tunisia and Libya were made. **Tunisia** presented a case study on Olive Value Chain. The technical issues included: insufficiency and irregular rainfall (97% in rain-fed); cultivation on marginal land and adopting good agriculture practices. On marketing segment the value chain is losing its market share. Low crushing capacity and smaller percentage of modern mills. The study proposed a number actions to improve the competitiveness of olive value chain.

Presentation on agricultural transformation and investment in agricultural value chains in **Nigeria** highlighted the fact that the government has divested out of procurement and distribution of fertilizer and other inputs. Private sector now sells seeds and fertilizer directly to farmers. Marketing corporations are being established to facilitate marketing for agricultural commodities. Three corporations are to be run as private sector led institutions. The target value chains commodities for financial (banks) and market support include Rice, Cassava, Cocoa, Tomato, Cotton, Maize and Soya beans.

From Asia, Mushroom Production Value Chain presented by **Indonesia** outlined a case of completely integrated supply chain that included :Spawn making and research; Modern compost preparation; Casing soil preparation; Growing and cultivation unit; Mushrooms canning unit; Frozen Facility and Organic Fertilizer unit. The point was made that all of product are ensured to be complied with GFSI- standard (brc, iso, sqf-2000), and it is the first mushrooms canned manufacturer in the world which was certified for sqf 2000 level 3. The company welcomed an opportunity to cooperate with our clients to determine the right style and size of mushrooms for special purposes as well as to create a particular blend of mushrooms as per their desire.

Visit to Ankara Union Milk Facility:

On the third day of the Workshop, the participants were taken to the visit of Ankara Union Milk Facility, so as to gain firsthand knowledge on the entire process of collection, processing and distribution of milk products. It was quite informative and gave insight knowledge about the usage of technology in preserving and enhancing the nutritious value of the milk products.

Closing Session:

At the end of the workshop a closing session was held, in which all the resource persons gave a summary of their presentations. The participants gave their views on the proposed recommendations and various issues were discussed. At the end of the session certificates were distributed to the participants as well as some shields and souvenirs were presented to the speakers and the collaborators.

Outcome of the Workshop:

As a result of the discussions, the participants were able to exchange views and agreed to cooperate with each other. The following were some of the agreements.

1. The workshop showed overwhelming interest in the subject. The profile of the trainees reflected a truly private/public participation and interaction. It also provided clear flow of information and knowledge among countries of OIC region. The participation of FAO and COMCEC made the workshop technically more sound in addressing the issues at regional and OIC levels.
2. Some member countries raised their concern about existence of various non-tariff barriers.
3. Bangladesh is exporting processed fruit juice particularly mango juice/drinks to many African countries. Mangoes are produced plenty in many African countries. Member countries from Africa requested Bangladesh to consider bring knowledge, technology to Africa to process the fruit juice regionally to take advantage of low cost raw material and other facilities.
4. Bangladesh has shown its interest to interact closely with Turkish dairy processors to learn from their milk collection and door to door distribution system.
5. Bangladesh presented the dairy value chain where dairy hub system adopted by PRAN has produced considerable results in terms of improving livestock situation, income generation and poverty alleviation. This model can be replicated in other member countries as appreciated and PRAN will be happy to facilitate the process.
6. The participants proposed to organize a workshop in one of developing country which will benefit greatly by involving both experts and farmers/entrepreneurs to exchange practical experience in solving problems at all stages of the value chain.
7. From Kingdom of Saudi Arabia a proposal was made that given the technical nature of the workshop and it's emerging importance, the time period for the future workshops be increased to at least a week to fully understand the concepts, tools and case studies with a hands on involvement/training of participants.

8. In view of great interest both from member countries and participation institutions, suggestion was made to request for possible technical and financial assistance from institutions from the OIC region, such as Islamic Development Bank, COMCEC, FAO, ESCWA, IFC, private sector and others to support, in future, by organizing such events under ICCIA and SESRIC fold.

Recommendations

The Workshop focused on the value chain, agro-processing, farm to fork activities and the issues that are being encountered by the various components of the value chain. Based on the presentations and the discussions, the following recommendations were adopted:

1. In view of the loss and waste of food after harvesting, catch, or slaughter, it was proposed to create awareness by engaging all elements of the chain so as to better handle food and minimize loss and waste, which will positively impact on food security and sustainable value chain development.
2. To put emphasis on food safety as an added value to a value chain and this shall be achieved by developing continuous and repetitive educational interventions in food safety in order to instill a food safety culture which is essential for sustainable safe and hygienic practices in pre- and post-harvesting stages.
3. To raise awareness on food safety risks via effective risk communication channel among all stakeholders of the food chain.
4. To integrate assessment tools that aim at understanding consumers preferences, level of awareness on health and safety, willingness-to-pay and perception of risks in order to craft an effective strategy for a sustainable food value chain and for creating marketing opportunities.
5. To underline the importance of implementing health policies, preventive measures and adoption of standards from farm to fork - at various stages of value chain.
6. Quality and food safety needs to be underlined by creating awareness throughout the value chain. There is also need to promote the halal concept in all food products at large and particularly in the meat value chain for its growing demand.
7. The small farmer have not been integrated in the modern value chain, they don't have access to technology, credit and markets. Small farmers depend on middleman for their marketing and credit needs incurring high cost and low return. There is a need to assess feasible options that minimizes the role of middle man.
8. Cold-chain technology is essential for preserving the quality and safety of food. Collaboration and investment is needed among private and public actors within a whole-of-value chain perspective, and with specific attention to the need of small scale food producers and agribusiness.
9. Create an association for agribusiness among OIC countries to facilitate marketing and business opportunities, and increase intra-OIC trade, including creation of agribusiness committee. There is also need to create a task force that would suggest the structure /sectors of such association.

10. To develop existing and proposed agribusiness value chain via facilitating the flow of knowledge, capacity building, capital commodity and services along with the entire chain.
11. To address the issue of small farmers in adopting good post-harvest practices due to high investment cost, creation of cooperatives / association is suggested. Such an action would provide economy of scale to the supply chain.
12. Investing in modern cold chain was suggested and some potential partner such as IDB Group especially ITFC were identified.
13. The workshop identified that there OIC region lacks data and credible studies on developing values and in this regard it was suggested that ICRIC may include this important topic in their programme of work.
14. To call upon the relevant Authorities to relax/remove some of the non-tariff barriers, so that the trading of various agricultural products will increase manifolds of OIC member countries.
15. In view of well documented water scarcity in the region, the value chain approach need to integrate the issues such as improving productive and allocative efficiency, water embedded in food losses and virtual water in inter and intra trade.

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