

**Project Title: “Food Production-Consumption Assessment to Improve Sustainable Agriculture and Food Security in the West Bank- Palestine”/
FPCA**

Project Number: 107090-001

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Final Technical Report

Project period: April 2013-April 2015

Date of submission: 20th of May 2015

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1. Executive Summary (2 page max.):

The research project entitled: “Assessment of food production and consumption to improve sustainable agriculture and food security in the West Bank” (FPCA) was implemented by the Applied research Institute-Jerusalem (ARIJ) in partnership with Ministry of Agriculture (MoA) and Ministry of National Economy (MoNE) during April 2013-April 2015. It aimed at developing a reliable, well-assessed, and up-to-date analysis of the locally produced agro-commodities production, marketing, and consumption systems to enhance the sustainability of the agricultural system and assist in improving self-sufficiency of agro-commodities production (most important locally cultivated crops). The project aimed to understand better the Palestinian market channels and to analyze the value chain management of the agricultural commodities and its main actors, in order to propose policy recommendations that can contribute to the development of the agricultural sector and the food security status of Palestinians in the West Bank. Furthermore, the research aimed at increasing stakeholders’ awareness on the importance of supporting sustainable agriculture, while building partnerships between stakeholders and policy makers in order to work together on essential issues, such as self-sufficiency and sustainability.

The project was accomplished on track with the project milestones and agreement. In order to achieve the project objectives, the research team surveyed 15 agro products namely (a) Field crops: wheat, potatoes, onions; (b) Vegetables: tomatoes, cucumbers, eggplants, squash, green beans, paprika; (c) Fruit trees: citrus fruits, guava, grapes, dates, almonds; and (d) olives, that were chosen in cooperation with the project partners in the Palestinian Ministry of Agriculture and the Ministry of National Economy, and other stakeholders. The criteria on which the choice of products was based included an assessment of the economic and nutritional value of these products. Furthermore, the research focuses on analyzing and understanding the different processes of agro marketing, and the value chain of each surveyed agro product; this was done through surveying the different agro-market actors including Palestinian farmers, wholesale and retail traders, processors, central wholesale markets, and end consumers. The project also included a comprehensive program that aimed at increasing the awareness of the different value chain actors on agro marketing best practices, challenges and potential solutions, and ensures communicating all research results with stakeholders, while building on their feedback and recommendations.

Throughout the research, main challenges facing the different actors in the value chain of agro products were identified, and response plans were designed and drafted covering the needs of each market channel at a national level. In addition, a visual representation of the value chain of each surveyed agro product has been designed, accompanied with a comprehensive agricultural calendar, and a consumption-production analysis that indicates the degree of self-sufficiency, the production surplus/deficiency; uncover the interrelation with food security at the West Bank level.

Along the project activities the project team built strong relationships and networking among relevant stakeholders mainly through the project partners MoA and MoNE and the Project Regional Committees which were formulated from representatives of both partner ministries' directorates covering all West Bank governorates, related NGOs and agricultural cooperatives at the level of northern, central and southern parts of the West Bank.

At the end of the project the research team concluded a number of publications as a main output of the research surveys and studies including executive reports describing the findings of project baseline surveys covering the production, marketing and consumption stages along the agro-marketing channel. This is in addition to the preparation of an overview about the Palestinian agriculture sector including status and challenges, awareness presentations, newspaper articles and press releases, Radio and TV flashes. Full reports describing findings of each executive report were also produced and can be accessed on the official website of the Applied Research Institute – Jerusalem (ARIJ), through the following link: <http://www.arij.org/index.php/publications/market-information-sytem>
For List of Acronyms please see Annex (27).

Brief about the Palestinian Agriculture Sector status (according to the project findings and literature) is as following:

The importance of the agricultural sector in Palestine stems from the contribution of its production to the food security of Palestinian households, in addition to the creation of job opportunities in the Palestinian local market. The agricultural sector is an important driver in the Palestinian economy since it creates job opportunities in the local Palestinian market. In the year 2011, there were 85,885 agricultural holdings in the West Bank. As of 2010, this sector was employing 11.5% of the Palestinian labor force, of which 33% were women.¹ In regards to agricultural trade, the value of agricultural exports grew by 32% from 2011 to reach \$56.7 million in the year 2013, contributing to 6.3% of the total value of Palestinian exports². In addition, agriculture plays a major role in the conservation of the environment, and supplies other sectors with inputs. In 2011, the value of Palestinian agricultural production reached up to \$1,295 million³.

However, the sector is facing many challenges and obstacles. The political conflict in Palestine is one major challenge including land confiscation, control over natural resources especially water, and restrictions on the mobility of products between Palestinian areas on one hand; and with

¹ PCBS (2012). Agricultural Census – 2010.

² PCBS (2013). International Trade, unpublished data.

³ PCBS (2012). National Accounts Report – 2012.

international markets on the other. Other challenges affecting the agricultural sector include: limited water sources, natural disasters such as drought, lack of rain, frostiness, and wind, limited budget allocation by the Palestinian Authority and donor agencies, agro marketing challenges due to the inadequate number of packaging houses and weak storage infrastructure, competition from Israeli products, high production costs, and price fluctuations. This is reflected by the deficit in the agro products balance of trade, where the value of Palestinian agro imports far exceeds its exports.

In order for the agricultural sector to regain its economic, historical, social and political strength, a set of practical procedures is needed to ensure the sectors sustainability. In terms of planning efforts, more support and commitment is needed from the institutions of the Palestinian government in terms of translating strategic plans and sector assessments into practical steps. Furthermore, there is a need to increase budget allocation to the agricultural sector while establishing a national fund for the compensation of farmers for their losses due to natural disasters, harsh weather conditions, and economic shocks. A group of other recommendations are also expected to push the agricultural sector forward, those include: the protection of small and medium size farms, encouraging research in the different fields of agriculture, building a national agricultural database accompanied with an information management system, and the revaluation of signed agricultural agreements. On the national level, efforts are needed in order to develop agricultural infrastructure, encourage the use of best practices in terms of water use, and support agro industries. Efforts are also needed to develop agro marketing through increasing the competitiveness of Palestinian agro products locally and internationally. In order for all these efforts to be beneficial, effective communication is needed between all stakeholders' within the agricultural sector.

2. The Research Problem (1 page max.):

Sound agricultural management and food production strategies are essential for any state if it is to provide adequate food supplies and ensure a high level of food security. To establish these strategies, states need to be capable of performing adequate analysis of their agricultural and food production markets, using this knowledge to create short and long-term strategies for crop and animal cultivation, importation and exportation of food, and food distribution. In addition sound agriculture planning based on accurate and up-to date research analysis at all levels is essential for improved food security in particular in the West Bank region. Hence, ARIJ proposed the FPCA project to promote self-sufficiency and enhance sustainable food security in the West Bank through assessing food consumption–production-marketing processes, raising awareness, and building partnerships with relevant stakeholders. The West Bank experiences various problems in terms of agriculture and food markets, including food insecurity, poor national strategy and planning, difficulties in agricultural production, heavy reliance on foreign aid and food imports, and growing resource scarcity. ARIJ believes that developing diversified and sustainable agricultural production and marketing systems forms a primary challenge faced by the West Bank in addressing these problems, and therefore proposes the FPCA project as an initial step towards the research, education, and policy planning essential to this strategy.

ARIJ believes it is essential to develop productive marketing systems and increase awareness of

marketing potentialities amongst farmers and agricultural workers in the West Bank. Those working in the agricultural sector deserve to be empowered through an understanding of the production –marketing systems that affect them, so that they can become more productive agricultural workers, planners, and profitable business owners. The outcomes of the proposed project are supposed to be used to suggest solutions and priority action plans that can be implemented on the ground to improve the agro-production and marketing system and to provide feedback, planning mechanism, and responding tool to the needs of the Palestinian market in the West Bank.

Upon accomplishing the project and its main objective; *“To conduct a baseline assessment of the food consumption-production process from farm to fork, encompassing food production, food availability and food marketing. The results will be disseminated to farmers to increase awareness of feasible and sustainable cultivation practices; and to planner and decision makers to inform related plans and policies towards increasing self-sufficiency, consumer purchasing power and availability of targeted agro-food produced in the West Bank. ARIJ intends to use this analysis to build partnerships with relevant stakeholders, and offer guidance towards better solutions at the production, consumption, marketing, and policy level”*, ARIJ still believes that the Palestinian production, marketing and consumption systems for the locally produced agro-commodities face diverse challenges that are incorporated into and in some cases result from the agriculture and economic sectors’ problems in general. In a scientific base approach, the project team tried to reveal and analyze the problems faced by the Palestinian markets, consumers and farmers.

As the project investigated the challenges that face the production, marketing and the consumption aspects of the agro-commodities in Palestine, the project presented itself as a significant response to the understand of the current situation, challenges and potential interventions in this respect. Note that the project produced a range of solutions and response plans toward reaching the status of an organized marketing Palestinian system upon the findings of the baseline surveys conducted. [This was done through presenting the problems, solutions, and relevant body that should contribute to the solution in a diagnosis table](#). The project team presented the solutions/response plans that were suggested by the project surveys to the regional, facilitator committees and selected decision makers during a series of workshops, brain storming session and interviews. This also has an impact on the decision makers’ perspective and thus potentially impacts the relevant national policies and plans.

The project findings of the different research from the different conducted surveys were all highlighted and advocated through the local media, newspapers, radio and TV channels and through conducting meetings with project partners, the project Facilitator Committee and project Regional Committees. A web-blog was initiated for the project at ARIJ website where all relevant publications were disseminated.

3. Progress towards milestones (5 pages max.):

The following is the project milestones described over the project period

Progress towards Milestones (April 2013- September 2013)

Milestone (1): Relevant stakeholders are aware about the project, partnerships are built between them, and their contributions to the project are identified and agreed on.

(1.1): Prepare and disseminate a concept brief and an announcement about the project to relevant decision-makers and other stakeholders. The announcement for the project was placed on the ARIJ website in both Arabic and English (annexed in 1st interim report).

(1.2): Identify project relevant stakeholders. A final list of stakeholders, including decision-makers with an interest in food security and agriculture, was prepared (annexed in 1st interim report).

(1.3): Conduct Kick off meeting for the project.

A kick-off meeting with relevant stakeholders was conducted (annexed in 1st interim report) in which the project objectives, plan of action and desired outputs were presented, in addition that the role of each institution in the project activities was explored, and the nominations from each institution for their representatives in the project Facilitators Committee were received.

Milestone (2): Rapid assessment is conducted.

(2.1) A list of proposed indicators for agro-commodities production consumption and market surveys has been prepared and revised

(2.2) A list of main markets has been prepared, detailing all of the main wholesale markets in the West Bank (annexed in 1st interim report).

(2.3) A list of potential targeted areas has been prepared including the localities that produce the biggest quantities of the 24 crops specified in the study (annexed in 1st interim report).

(2.4) A list of potential targeted farmers, producers, traders and consumers has been prepared (annexed in 1st interim report).

(2.5) An initial field survey for the main markets in the West Bank has been executed and a market gap analysis report has been prepared (annexed in 1st interim report).

(2.6) Field survey for the localities that produce the greatest quantities of the 24 crops specified in the study has been conducted, and fact sheets (annexed in 1st interim report).

(2.7) *Literature review* and Market Gap Analysis reports have been produced regarding the production system, supply-demand balance, market channels, pricing, gaps, challenges and potentials localities that mostly produce the 24 crops specified in the study (annexed in 1st interim report).

Milestone (3): Project progress is followed up

(3.1) Semi-annual **project progress report** is prepared and submitted to the IDRC with the supporting documentation.

(3.2) ARIJ monitoring and evaluation reports and survey sheets for the first project progress have been prepared and included (annexed in 1st interim report).

Progress towards Milestones (October 2013-March 2014)

Milestone (1): Regional and facilitators committees are formulated and coordination enhanced (first coordination meetings).

(1.1) ARIJ initiated a new partnership with the Ministry of National Economy (MoNE) (annexed in 2nd interim report).

(1.2) First facilitators committee meeting was held; presentation of the project and agreement on a series of methods which should be used during the baseline surveys (annexed in 2nd interim report).

- (1.3) Series of meetings with ministries' directorates all over the West Bank region for the preparation for formulating the regional committees (annexed in 2nd interim report).
- (1.4) Regional committees were formed and three meetings were conducted for the members (annexed in 2nd interim report).
- (1.5) List of facilitators' members (annexed in 2nd interim report).
- (1.6) Photos and minutes of meetings for 4 meetings conducted (1 meeting for each project region and a meeting for the facilitators' committee) (annexed in 2nd interim report).

Milestone (2): Locally produced targeted crops and agro-commodities are identified and analyzed in a participatory approach with the relevant stakeholders.

- (2.1) Final list of 15 crops and locally produced agro-commodities selected from a primary list of 24 crops (included in the project proposal document), through conducting a specialized workshop; presenting the selected project crops after thorough discussions with project partners (annexed in 2nd interim report).
- (2.2) List of participants who were involved in crops and agro-commodities selection workshop, minutes of meeting and photos for the workshop (annexed in 2nd interim report).
- (2.3) Initial report about selected crops and locally produced agro-commodities (annexed in 2nd interim report).

Milestone (3): Farmers (1st round) and producers' baseline surveys.

- (3.1) Identify the study area and targeted localities (annexed in 2nd interim report).
- (3.2) Prepare descriptive document about selected governorates/localities including their livelihood conditions highlighting the agricultural aspects (annexed in 2nd interim report).
- (3.3) Distribute a number of baseline questionnaires by crop types and localities (annexed in 2nd interim report).
- (3.4) Final list of producers and traders at governorate level (farmers and consumers will be selected randomly) (annexed in 2nd interim report).
- (3.5) Questionnaire templates for farmers', traders', producers', and consumers' surveys (annexed in 2nd interim report).
- (3.6) Farmers' questionnaires for crops cultivated or harvested in the winter season (not completed yet during this project phase).
- (3.7) Producers' baseline questionnaires (not completed yet during this project phase).

Milestone (4): Project progress is followed up.

- (4.1) Semi-annual report on major project findings distributed to main stakeholders including mainly the regional committees and their organizations as regular feedback on progress and recommendations is distributed.
- (4.2) Semi-annual project progress report submitted to IDRC.
- (4.3) ARIJ M&E reports, survey sheets, and financial balance sheets for project progress are included in the project financial report (Annexed in 2nd interim report).

Progress towards Milestones (April 2014 - September 2014)

Milestone (1): Coordination among regional committees and facilitators' committee enhanced (second coordination meetings)

- (1.1) List of attendance for 4 committees' meetings conducted for coordination and project findings presentation among committee members

- (1.2) Photos for 4 meetings conducted (1 meeting for each project region and a meeting for facilitators committee). The meetings were not done at this stage of the project (justification in 3rd interim report)

Milestone (2): Conduction of Farmers (2nd round), traders, consumers, governmental bodies, and markets baseline surveys

- (2.1) Files of 150 completed *traders* questionnaires

- (2.2) Traders baseline database

- (2.3) Photos for interviews and Field survey reports completed

Response on milestone (2.1-2.4): The project team has initiated the work on the traders' survey. The questionnaire template was prepared and reviewed by ARIJ and the project partners, and 20% of the questionnaires were filled out; mainly by traders from the northern parts of the West Bank.

- (2.4) 12 Central *markets* were surveyed and daily information sheets were collected for two central markets. Markets survey database was created (available at ARIJ)

Response on milestone (2.5): Factsheets for a 10 month period were collected from the markets based on the availability of information at the market. A report about the Palestinian central markets was produced. (Annexed in 3rd interim report)

- (2.5) Files of 975 completed farmer questionnaires for 2nd round

- (2.6) Farmers baseline database updated (available at ARIJ)

- (2.7) Photos for interviews and Field survey reports completed (Annexed in 3rd interim report)

Response on milestone (2.6-2.9): Farmers' survey was almost done with 1779 questionnaires completed by farmers from all over the West Bank. Factsheets for 12 months (agricultural year) at the farmer level were also distributed and completed by farmers (for 25% of the farmers). (Annexed in 3rd interim report)

- (2.8) Files of 300 completed *consumer* questionnaires

- (2.9) Consumers baseline database created

- (2.10) Photos for interviews taken and Field survey reports completed

Response on milestone (2.10-2.13): This survey was completed with 419 questionnaires were filled out, reviewed, entered on SPSS, refined and analyzed. (Annexed in 3rd interim report)

Progress towards milestones (October 2014-April 2015)

Milestone (1): Coordination of regional committees and facilitators committee enhanced

- (1.1) List of attendance for 7 **committees' meetings** conducted for coordination and project findings presentation among committees' members.

- (1.2) Photos and minutes of meetings for 7 meetings conducted (2 meetings for each project regional committee). This step has covered the meetings that were supposed to be conducted in the last project period (April 2014-September 2014) and were postponed until the analysis of the surveys is done and the meetings that were supposed to be conducted during this project period (October 2014- April 2015). (See Annex 2)

Milestone (2): Farmers (2nd round), traders, consumers, governmental bodies, and market baseline surveys conducted

- (2.1) Files of 2019 farmers' questionnaires completed, farmers baseline database created, photos taken for interviews, field survey reports completed. Up to 240 questionnaires were done during the 2nd round of the farmers' baseline. (See Annex 3)

- (2.2) Market factsheets are collected, markets survey database created. (See Annex 4; template for wholesale Market factsheet). Market factsheets have already been completed in the

previous phase and daily factsheets for 2 markets (Hebron and Nablus Central Wholesale Markets) were collected for 12 months (this depended on availability of data at market).

- (2.3) Farmers factsheets for a ten month period, Farmers collected data is also saved in a database form. (See Annex 5).
- (2.4) Files of 150 completed *traders* questionnaires
- (2.5) Traders baseline database
- (2.6) Photos for interviews
- (2.7) Field survey reports completed

Response on milestone (2.1-2.4): The project team has finalized filling 150 traders' questionnaires including interviews with retailers and wholesalers dealing with the project surveyed crops. (See annex 6 - example on a filled questionnaire template with a trader and annex 7 for photos for the interviews and field survey reports).

- (2.8) Traders factsheets for a ten month period and producers factsheets for a ten month period; was not accomplished since the traders and processors refused to cooperate with the project team. They think that this would cost them lots of time and some noted that this is not feasible since they do not record their work activities, amounts of agro-products they are dealing with or even prices.
- (2.9) Analysis and technical reports for all surveys conducted, including farmers, producers, traders, consumers, market, and governmental bodies' surveys (See Annex 8: briefed booklet entitled: "Palestinian Agricultural Production and Marketing between Reality and Challenges")

Milestone (3): Coordination, oriented awareness, and advocacy amongst different stakeholders from the farming, producing, trading, and consuming communities is achieved

- (3.1) List of attendees of 3 awareness sessions for farmers (30 persons /session); photo and newspaper documentation. The total number of attendance has changed to become 121 farmers attending the three sessions. (See Annex 9)
- (3.2) List of attendees of 3 awareness sessions for producers (30 persons /session); photos and newspaper documentation. The total number of attendance has changed to become 50 processors attending the three sessions. (See Annex 10)
- (3.3) List of attendees of 3 awareness sessions for traders (30 persons /session); photo and newspaper documentation. The total number of attendance has changed to become 30 traders attending the three sessions. (See Annex 11)
- (3.4) List of attendees of 1 awareness session for consumers' associations and advocacy groups (30 persons /session); photo and newspaper documentation. This session was extended to become two sessions; one covering the northern governorates and the other session was conducted to cover the central and southern governorates of the West Bank. Both session included attendance. (See Annex 12)
- (3.5) Three registered radio sessions and 2 TV sessions, 3 special reports and 3 case studies in newspapers about the project and its findings including pressure-advocacy messages.

This was accomplished as following:

- 4 Radio Flashes were broadcasted each targeting one surveyed group along the market channels including farmer, trader, processor, consumer and central market. The broadcasting has covered the whole West Bank region on Baladna Radio channel (the four Radio flashes can be downloaded through following links:
 - Farmer Radio Flash: <https://youtu.be/2QiufRzsgbo>
 - Trader Radio Flash: <https://youtu.be/yX-nfS1vwHY>
 - Market Radio Flash: <https://youtu.be/fX-3qTZ8sMo>

- Consumer Radio Flash: <https://youtu.be/hs8akE9CW0w>
- The schedule for broadcasting is in annex 13
- 4 TV flashes broadcasted as news belt along while broadcasting diverse types of programs. (example is found at URL: http://youtu.be/AIX_SwYM9do)
- TV session broadcasted in news and as a recorded session at Ma'an channel and its partner TV channels. (Access through URL:
 - <https://www.youtube.com/watch?v=Z9BptPijfis>
 - <https://www.youtube.com/watch?v=tc8ufSVA7Hg>
- 6 Newspaper articles were published in Al Ayyam Newspaper covering the following subjects:
 - Central Wholesale Markets in the West Bank published on 12th February 2015. (See Annex 14)
 - Palestinian Household consumption trends for Agro-commodities Published on 18th February 2015. (See Annex 15)
 - The Palestinian Trader's Role in the Value Chain of Agro-commodities published on 10th of March 2015. (See Annex 16)
 - The Food Industry Sector in the West Bank published on 18th of March 2015. (See Annex 17)
 - The Palestinian Farmer: Production Analysis and Challenges published on 29th March 2015. (see Annex 18)
 - The Palestinian Agriculture Calendar published on 30th of March 2015. (See Annex 19)
- (3.6) 1500 copies of the research study including the project achievements and research conducted.
 - A booklet was produced in both Arabic and English languages. 1800 copies were printed (900 copy for each language). (See Annex 8)
 - 14 Flyers for Value Chain for 14 surveyed crops were produced and disseminated during the final project workshop. (See Annex 24: example on Tomato Value Chain Flyer).
 - Maps in Annex 22.

Milestone (4): Oriented advocacy and sharing of info with decision makers and food policy planners is conducted

- (4.1) List of attendees participated in the Decision Makers' brain storming session, photos, and newspaper articles. (See Annex 20)
- (4.2) List of attendees for the Closing Ceremony Workshop, photos, press release, and newspaper articles. (See Annex 21)

Milestone (5): Project progress followed up

- (5.1) Semi-annual report on major project findings distributed to the main stakeholders including mainly regional committees and their organizations as regular feedback on progress and recommendations is provided.

****This step was done continuously every six months of the project period***

- (5.2) Final project progress report submitted to IDRC. This will be done at end of the second year. ****This step is done upon the completion/submission of this report to IDRC.***

- (5.3) ARIJ M&E reports, survey sheets, financial balance sheets, etc. showing project progress. (See Annex25 for both: Monthly Project Monitoring Reports and performance sheets and Annex 26 for financial report)

4. Synthesis of research results and development outcomes (15 pages max.):

Objective (1): To develop a network of stakeholders involved in food policy in the West Bank.

i. Built partnership with Ministry of agriculture and Ministry of National Economy

ARIJ started the implementation of the FPCA project in full partnership with the Palestinian Ministry of Agriculture (MoA). A meeting was conducted with the Minister of Agriculture - Dr. Walid A'saf, where the project announcement was submitted and an official letter in both Arabic and English requesting the ministry's partnership in the project was handed to him (annexed in 1st interim report). As a response the MoA Minister nominated Mr. Reyad Al Shahed, General Director of the Statistics Department at MoA, to be the focal point at the ministry and to follow up the project representing MoA (annexed in 1st interim report). A meeting was later conducted with the MoA - Agricultural Statistics department, during which the project proposal was revised and certain information was requested from the MoA concerning the agricultural localities and the main markets in the West Bank (annexed in 1st interim report). A brief about the project was also sent to the Ministry of Agriculture and PECDAR as partners in the project (annexed in 1st interim report).

The project team built partnership with Ministry of National Economy (MoNE) through contacting Dr. Jawad Najee, the MoNE minister; upon which he nominated Mr. Saber Al Amleh Head of the local support department to be the focal point at the ministry and to follow up the project representing MoNE. A meeting was conducted with Mr. Al Amleh at his offices introducing the project, its objectives, activities and outcomes. He also suggested few steps to be taken into consideration and provided relevant references for the project team such as: The State of Palestine National Export Strategy 2008-2014, and the Palestinian Agro-commodity/ Crop Standards set for each crop type through PSI (Palestinian Standards Institute). This step launched the partnership with MoNE in parallel with MoA partnership (annexed in 1st interim report).

ARIJ, in partnership with MoA and MoNE introduced the project to the key stakeholders, including the Ministry of Local Government, the Ministry of Planning, the Palestinian Central Bureau of Statistics (PCBS), PECDAR, and others. This was carried out through a project kick off meeting conducted in September 2013 (annexed in 1st interim report). A project announcement sheet was prepared and distributed to relevant stakeholders and uploaded on to the ARIJ website. Up to 20 organizations attended the kick off meeting representing the governmental and non-governmental organizations in addition to municipalities, universities, private sector and

international organizations.

ii. Facilitators and regional committees' formulation and meetings:

On the 31st of September 2013 the initial list of members in the facilitators' committee was set at the kick-off meeting. The final list of facilitators' committee members was finalized during the crop selection workshop held in February 2014. The members were mainly representing the municipalities, relevant governmental organizations, non-governmental organizations, universities, agriculture cooperatives, and the private sector (annexed in 2nd interim report).

The first meeting for the facilitators committee was held on the 15th of January 2014 at ARIJ premises in Bethlehem. There were eleven attendees present at the meeting. This meeting, in which all partners were present, had fruitful outcomes. First the project idea, objective, and expected outputs were presented; highlighting the reasons behind selecting this project and its importance to reduce the gaps and challenges that face the agro- marketing sector in the West Bank on a national level. Second, the committee was able to set the methodology on how the final 15 crops and locally produced agro-commodities would be selected. During this meeting, coordination was enhanced between ARIJ and the project's main partners where the role of each partner was discussed and approved. ARIJ accordingly ensured the participation of the partners and their approval on the project activities and later their support for the project results along the project implementation period. Both partners, MoA and MoNE emphasized the importance and value of this project, and approved the project action plan.

Three regional committees were formulated, representing the northern, central or southern region of the West Bank. The committees included relevant institutions that would facilitate the work of the baseline survey which ARIJ intends to carry out. The regional committees comprise of 55 members in total (annexed in 3rd interim report). Members were very enthusiastic about the project and all offered their expertise in their involvement of the project. It was agreed that the three committees' members will help in conducting the project baseline surveys and presenting the questionnaires on the ground. In some cases they would be involved in supervising the baseline proceedings. Because the members are individually selected from the three representative regions, their practical knowledge of the markets and producers within their particular region was beneficial to the outcomes of the project.

During the project period, the project team conducted three meeting for each regional committee; the first one was for introducing the project and its activities in addition to finalizing the selection of localities that were targeted for farmers' baseline survey, where each locality was selected based on the type of cultivated crop in the area. A list of localities (all over the West Bank Governorates) and potential cultivated crop was concluded. The meetings were held as following: The southern Regional Committee meeting was held on the 6th March 2014 at ARIJ premises in Bethlehem city, the central Regional Committee meeting was held on the 18th of March 2014 at MoA in Ramallah city, the northern Regional Committee meeting was held on the 25th of March 2014 at Jenin MoA's directorate in Jenin city (annexed in 2nd interim report).

The second meeting with the regional committees aimed at presenting the project progress, project findings mainly the finding of both the Central Wholesale Markets and the Consumer Baseline surveys; special focus was given to their feedback and recommendations. The meetings were held as following: The northern Regional Committee meeting was held on the 3rd of December 2014 at Hayat Nablus Hall in Nablus city, the southern Regional Committee meeting was held on the 8th of December at ARIJ premises in Bethlehem city, the central Regional Committee meeting was held on the 9th of December at Ministry of Agriculture in Ramallah city. (see Annex 2)

The third meeting with Regional Committees was held aiming at presenting the Farmers' Baseline findings and getting feedback and recommendations of the members. The meetings were held as following: The central Regional Committee meeting was held on the 24th of February 2015 at Caesar Hotel in Ramallah city, the southern Regional Committee meeting was held on the 25th of February 2015 at ARIJ premises in Bethlehem city, the northern Regional Committee meeting was held on the 26th of February 2015 at Al Qala'a Hall in Nablus city. (see Annex 2)

The project partners supported the project team in general through providing advice throughout the implementation of the project activities. Of particular interest regarding the results is the understanding and enthusiasm that the project team found among the different stakeholders and mainly among the project partners (MoA and MoNE). They were involved in setting all types of project methodologies, in questionnaire template preparation, nominating the directorates' members to facilitate the project team work in the field, participating in all project meetings and workshops and supporting and leading the discussions initiated at the meetings. In addition the project partners were involved in the follow up of the field surveys. They also supported the project by providing ARIJ the agricultural statistics concerning the cultivated area for each selected crop for the year 2013 (unpublished data). Both partners offered the related food/agriculture policies and laws.

The Regional Committees had a wide range of participation during this project period; including their participation in reviewing the farmers' questionnaire template, providing the project team with farmers' names per governorate/locality based on the Agriculture records of 2010 at each MoA directorate, facilitating the conduction of the survey in the field through either providing guidance or through providing updates on farmers' status. The committee members also helped the project team in reviewing the filled out questionnaires and in receiving the final reviewed version of the questionnaires at MoA's directorates. This process has strengthened the cooperation and involvement of Regional Committees and partners along implementation of the project activities. This also enriched their feedback to the project and helped finalizing the surveys in the most successful manner. It also ensured the accuracy of data collected in the field since both farmers and field surveyors were supervised by MoA members who are members of the project Regional Committees. It is also important to note that during the selection of field surveyors the process of selection was revised by both partners: MoA and MoNE. ***(The describe role for the project partners and committees comes in response to the AFS outcomes- Policy Options and Research groups sections).***

Objective (2): To analyze the major crops and agro-commodities produced and consumed in the West Bank in order to identify opportunities for efficiency in supply chains.

A. Desk study and Literature Review:

Since the beginning of the project, ARIJ's project team started to collect information about the Palestinian agro-commodities production, marketing and consumption, in addition to explore the efforts done in this field by other organizations and conduct desk study and literature review about the agriculture sector. After finalizing the literature review and market gap analysis studies, which were submitted to IDRC in the first interim report, the project team worked on identifying potential stakeholders, formulating project committees (the three Regional committees and facilitators committee), identifying potential farmers, traders, processors and central wholesale markets to be surveyed

B. Selection and analysis of Project targeted Crops:

The second step was the selection of agricultural crops to be surveyed in the research study. A final list of 15 locally produced crops were selected from a primary list of 24 crops. This selection was done after a series of actions; first gathering info at crop level including cultivation areas and distribution, production quantities, percent of exporting and importing, percent of self sufficiency per crop, and others from PCBS (Palestinian Central Bureau of Statistics), MoA, and MoNE. The second step to select the crops through specifying the criteria upon which the crops will be ranked and thus selected. This was done through the consultation with the project partners via a series of meetings and phone calls. The indicators on which the choice of products was based included an assessment of the economic and nutritional value of these products including the crop cultivated area, rate of crop self sufficiency (which measures the gap between production and consumption rates) at national level, value added of the crop, and percent of exporting from total crop production value. A ranking model was utilized to prioritize the crops. The described indicators were then given value and ranking grades upon which the crops with highest cultivated area, self sufficiency, value added and exporting value were given highest grades and thus were selected.

After coming out with a draft list of crops, and a brief report about the selected crops, a workshop was held on the 11th of February 2014 in Ramallah city with relevant stakeholders including the project partners. This was held in order to ascertain the 15 different crop selections undertaken by the project in a participatory approach with the relevant stakeholders (annexed in 2nd interim report). Again, the project objectives, frameworks/ activities and expected outcomes were all presented and discussed with attendees. During this workshop, the project partners had a major role in facilitating the meeting; noting that Dr. Hazem Al Shunar; Ministry of National Economy Deputy and Eng. Ryad Al Shahed; Director of Agriculture Statistics Program at Ministry of Agriculture led the workshop and supported the methodology chosen to select the 15 crops. This meeting was attended by 18 people, representing 12 different institutions (annexed in 2nd interim report). Discussions surrounding the project as a whole were raised during this meeting and

recommendations were suggested by participants for a successful implementation. All inputs and discussions were noted and considered by the project team. Ultimately, a consensus was reached on the final 15 crops and agro-commodities which will be studied in this project. The crops that were selected for the study are namely (a) Field crops: wheat, potatoes, onions; (b) Vegetables: tomatoes, cucumbers, eggplants, squash, green beans, paprika; (c) Fruit trees: citrus fruits, guava, grapes, dates, almonds; and (d) olives.

(The analysis and findings reached based on the implementation of the different baseline surveys comes in response to the AFS outcomes- Research groups and Food distribution sections – Annex 1).

Of the main project findings related to this objective is the following:

- Palestinian farmers have recently shifted their activities to vegetables' production due to its higher profitability, and shorter production cycle. In regards to the production of fruit trees, the research indicates a shortage in production that does not cover the households' consumption needs. The majority of field crops have low levels of self-sufficiency due to the gap between production and consumption. And although field crops are rainfed, their cultivation and production decreased in recent years due to fluctuations in rainfall quantities, low profitability per dunum, high production cost, and weak resistance to diseases and others.
- The products of olive oil, grape, tomato, cucumber, green almonds, wheat- freekeh and eggplants are the ones that achieve self sufficiency⁴ during their harvesting season.
- The products of citrus, date, guava, squash, paprika, green kidney bean, wheat and its derivatives except freekeh, dry onion, and potato do not cover the needs of the local market all over the year; not even in its productions season.
- Thus, an agricultural plan for production calendar is very essential to develop the agriculture sector and to reach self sufficiency at the Palestinian agro-commodities along the production seasons.
- **Vegetables** are considered essential elements of the nutritional diet prevalent among Palestinian households. In the West Bank, only 8.1% of total productive agricultural land⁵ in the West Bank is utilized for the cultivation of surveyed vegetables⁶. Despite this, the production of vegetables represents 65% of the total production of these crops. This is mainly due to the high productivity of vegetables per dunum in comparison with other crops. Survey results estimate that the average productivity of vegetables is 5,184kg/dunum, with a total annual production of 345,824 tons. Up to 59% of vegetables harvesting takes place during the six months of February, March, April, May, June, and December.

⁴ Self-sufficiency means here the community's ability to achieve complete dependence on its resources in the production of all locally needed food products

⁵ The total cultivated agricultural land here refers to the total land cultivated with the surveyed crops including vegetables, fruit trees, olives, and field crops.

⁶ Palestinian Ministry of Agriculture (2013). Cultivated area of surveyed crops 2012/2013. Unpublished data.

- **Fruit Trees:** In the West Bank, only 9.9% of total agricultural land of surveyed crops (including vegetables, fruit trees, olives, and field crops) is utilized for the cultivation of fruitful fruit trees in the West Bank⁷. The production of fruit trees represents 16% of the total production of these crops. The project survey results estimate that the average productivity of fruit trees is 1,048kg/dunum, with a total annual production of 84,840 tons. 66% of fruit harvesting takes place during the 4 months of August, September, October, and November.
- **Field Crops:** In the West Bank, 19.7% of total agricultural land in the West Bank (including vegetables, fruit trees, olives, and field crops) is utilized for the cultivation of productive field crops⁸. Total production of surveyed field crops represents 15% of the total production of these crops. The project survey results estimate that the average productivity of field crops is 492kg/dunum with a total annual production of 79,923 tons. Up to 73% of field crops' harvesting takes place during the 4 months of January February, May, and June.
- **Olives:** In the West Bank, 47.1% of total agricultural land in the West Bank (including vegetables, fruit trees, olives, and field crops) is utilized for the cultivation of fruitful olive trees⁹. The project survey results estimate that the average productivity of olive oil is 47kg/dunum, with a total annual production of 23,947 tons. Olives' harvesting takes place during the 3 months of October, November and December

Objective (3): To analyze the role of various agro-food production-marketing stakeholders for value chains for specific agro-commodities.

And Objective (4): To analyze locally produced agro-commodities and marketing channels within the West Bank, with Israel, and with other States.

A. Preparation for baseline surveys:

To start the baseline survey in a positive manner, the project team prepared the methodologies necessary for each baseline mainly the methodologies for selecting farmers, localities, traders, processors and consumers. The methodologies were set and revised project partners and supported by the regional committees (annexed in 2nd interim report) as following:

1. Distribution of 2000 farmer questionnaires on the selected crops; in groups (vegetables, fruits, field crops and olives) and as individual crops.
2. Number and percentage of questionnaires per governorate per crop type.
3. Number and percentage of questionnaires per locality per crop type.
4. The total number of farmers proposed to survey in each targeted locality and for each selected crop.
5. Number of consumers to be surveyed per governorate per locality type.

⁷ Palestinian Ministry of Agriculture (2013). Cultivated area of surveyed crops 2012/2013. Unpublished data.

⁸ Palestinian Ministry of Agriculture (2013). Cultivated area of surveyed crops 2012/2013. Unpublished data.

⁹ Palestinian Ministry of Agriculture (2013). Cultivated area of surveyed crops 2012/2013. Unpublished data.

6. Number of traders distributed on their legal status and type of trading (retailer or wholesaler).
7. Number of processors distributed on factories and agriculture and food processing cooperative.

For example, the farmers' names list was collected from the Regional Committees, where each MoA's directorate provided the project team the nominated names of the farmers per crop type per locality according to their harvesting season (this step was a random step, where farmers were randomly selected from a larger list of farmers per governorate already available at MoA's directorates at each Governorate). The initial list of the producers and traders were decided upon via feedback from the project partners and ARIJ's experience in the field. The coding for the questionnaire has been prepared using SPSS software. Concerning the list of farmers, it was decided that, based on the localities that have been selected, a random sample of farmers and consumers will be selected. This method was chosen to prevent any bias in the selection of farmers or the prioritization of certain production methods. By deciding to select randomly from the overall data, the results presented the best possible range of farmers and consumers covering all three regions of the West Bank.

Five templates of baseline questionnaires were developed and revised by the project partners. The five templates included: farmers', traders', processors', wholesale markets' and consumers' questionnaires (annexed in 2nd interim report). Factsheets for farmers was prepared and filled (annexed 3rd interim report) (for 2nd phase see Annex 5). The Factsheets for wholesale central market were also prepared and filled for the 2 surveyed central wholesale markets – Hebron and Nablus markets (see Annex 4).

B. Farmers baseline survey:

The farmer's baseline survey started on mid-April 2014 and finished in January 2015 after the selection and training of field surveyors and data entry assistants to ensure better performance while filling the questionnaires and later while data processing. The project team has facilitated the work of the surveyors in the field, followed up the survey in the field, reviewed the completed questionnaires twice, received the questionnaires in the presence of MoA's Regional Committees' members and coordinated all of the above steps with the project partners and Regional Committees.

The project team increased the farmers sample size by 50 questionnaires to reach 2000 questionnaires to reduce the effect of the non-response factor and to get more representative data for those crops with low sample size (number of questionnaires). The distribution of sample size per crop type is explained in Annex 23 (table 1 and 2). The detail of this step was explained in the 2nd interim report.

According to the above mentioned proportional representation the number of the surveyed farmers was selected based on the proportion of each crop (2000 targeted farmers) (see Annex

23 - Table 2).

The annual amounts of production and consumption of each crop were the two indicators upon which the farmers' numbers per crop type and governorate were distributed. The distribution of questionnaires per crop was built based on a weight methodology for the two criteria; production and consumption through giving 70% weight for production and 30% for the consumption. This method was found to be the most appropriate since it better reflects the real status of the crops from two different aspects: the amount of production available by governorate and the household consumption per crop per governorate. It also reflects the real agricultural calendar for each crop in comparison to the cultivated area and the consumption for that crop.

The final list for the distribution of the number of farmers per type of crop per governorate is described in Annex 23 (table 3).

The distribution of farmers per governorate per locality was based on the cultivated area per locality at the West Bank level and the recommendations from the Regional Committee. During the Regional Committees' meetings conducted in the first year of the project, the selected localities were discussed thoroughly based on the available cultivated areas per crop (based on the PCBS agricultural census – 2010), and the feedback from the Regional Committee members (based on their experience gained from the daily work in the field). Accordingly, the number of farmers targeted by governorate by locality was set as annexed in 3rd interim report. (See Annex 22 (Map 1)).

Another issue which needed follow up was the list of names of farmers that should be targeted at each locality. It was decided to gather this from the Agriculture Record at the MoA's directorates at each governorate; the records are for the year 2010, thus the records were supported by updates from field agents at each governorate. The agents revised the records and updated the names of farmers (when necessary) according to their experience in the field.

Upon arrangements made with the project partners, the project team selected the field surveyors from a list provided from the Palestinian Engineering Union and ARIJ staff - the Agriculture Department. The field surveyors were selected from all over the West Bank governorates, based on their experience in the field and were assigned to survey the closest locality to their residence so as to ensure that the surveyors would know the targeted area and how to reach the selected farmers. The field surveyors were mainly agriculture engineers and extension agents¹⁰. Two training courses were conducted for field surveyors about the best methods for filling out the questionnaires. The farmer questionnaire was studied and revised by the surveyors. The best methods for dealing with local farmers and enquiring about information were all discussed in

¹⁰ This strategy has greatly helped the project team to finalize the survey in an optimum timing. The survey was not particularly affected with the latest political conflict that took place in August 2014 in the West Bank and escalated in the Gaza Strip.

detail in the training. Of course the aim, plan and expected results of the project itself were explained to the surveyors. The first training was conducted for field surveyors from the central and southern regions of the West Bank and the second training was for field surveyors from the northern region of the West Bank (annexed in 3rd interim report).

The field surveyors started their work at the beginning of May 2014 and finalized the first phase at the end of August 2014. During this phase the surveyors covered 1779 questionnaires out of 2000 questionnaires including the 50 non-response extra questionnaires. The number of questionnaires at this stage was determined based on the selected agricultural year for the survey (October 2013 until September 2014). Accordingly, the survey covered the months from October 2013 until June 2014. Thus all the crops that were harvested from October 2013 until June 2014 were included in the survey. Sometimes the project team was obliged to divide the questionnaires of a crop into half if the harvesting season started but did not finish yet. The number of farmers surveyed in the first phase per crop per governorate is in Annex 23 (table 4).

The farmers' factsheets that covered 12 months of the year were completed in parallel with the questionnaires. The sheets are in the analysis process. The project team used the findings of the factsheets in studying the seasonality of the crops and building the agriculture calendar accordingly (see Annex 8 and 24: booklet and value chain flyers).

Another 240 farmers were surveyed starting at the end of September 2014 to cover those crops that are harvested in the months of June, July, August and September (see Annex 23 (Table 5)). Upon the finalization of the 2nd phase; the farmers' baseline survey period covered the agricultural year October 2013 until September 2014 as the project research year. The second survey was done over a month and then the analysis was completed and integrated with the analysis of the first survey phase.

After receiving the questionnaires the project team with the support of members of the Regional Committees revised the filled data and approved the questionnaires. The questionnaires were then forwarded to the data entry assistants who were already trained on data filing and the SPSS database prepared for the project. After analyzing the whole data collected for the farmers' baseline, the project team produced a comprehensive report for the farmers' baseline survey in Arabic and an executive summary in English and Arabic languages. The reports were shared with the project partners and the main findings were also shared with the regional committees. The feedback of both the partners and committees were taken into consideration while finalizing the final version of the reports. The reports presented the indicators studied in the survey at different levels including the West Bank level, governorate level, crop type (vegetables, fruits, olives and field crops) level. Upon the production of the reports, awareness material were prepared in the form of a presentation and circulated to a sample of surveyed farmers from all over the West Bank region during the conducted awareness sessions for farmers. The presentation included guidelines and recommendations that support the farmers, their cultivation, production and marketing processes.

Of the main project findings related to this objective is the following:

- The average number of workers in a farm in the West Bank is 11.3, of which 69% are male and 31% are female. Furthermore, the 75% are paid workers (formal), while the rest are unpaid (informal) since many of them are family members and owners of farms
- The surveyed farmers who cultivate potatoes are the ones that earn the highest income per month in comparison to the surveyed farmers who cultivate other crops. It was found that the estimated average income earned by Potato farmer's household from agriculture is 3,474 NIS. It was also noticed that the least income is earned by olive farmers, where their estimated average income per household per month reached only 965 NIS
- only 33% of surveyed farmers are members of agricultural cooperatives and associations
- The project survey results show that 53% of surveyed farmers own their agricultural land, 34% rent it and pay this rent in cash, while 11% rent it from owners in return of an agreed-upon share of productions.
- 82% of surveyed farmers depend in their pricing on the supply and demand in the local market; while 16% of them depend on prices agreed upon in agreements with traders (most of the agreements are verbal). It is worth noting that prices vary among governorates depending on the availability of products in the market. The majority of surveyed farmers have confirmed this variation and related it to seasonality and changes in weather conditions.
- The Palestinian farmers sell their products either directly to the wholesale central markets (66%), to the wholesalers (7%), to the retailers (1%), to processing factories (6%), to the consumers (8%), to the Israeli market (8%), and / or export their products directly to abroad (4%).
- Of the main Palestinian agro-products that are sold to the Israeli market are cucumber, onions and squash, while Guava and dates are the main crops exported to foreign markets.
- The distribution of the Palestinian agro-production at market level in general is as following: 80% to the local market, 14% to the Israeli market, and 6% to foreign markets at the agriculture season.
- The increase in input prices is one of the main issues facing the agricultural sector in Palestine, and is sometimes the main reason behind the losses incurred by farmers. Results indicate that 88% of surveyed farmers confirmed an increase in input prices over the 3 previous years with an average annual growth of 10%.
- Of the main challenges that face the farmers are:
 - The losses of farmers due to natural disasters and harsh weather, especially with the absence of an insurance system,
 - The Palestinian market witnesses price fluctuations on daily basis, due to lack of information sharing about supply and demand of many products,
 - The Palestinian market is an open market to the Israeli agriculture products the whole year, which weaken the competitive advantage of the local product especially during the production season; given that the Israeli products in most cases trade at lower prices,
 - Poor coordination between Palestinian farmers and relevant stakeholders especially in regards to the choice of cultivated crops. This results in most cases in surplus or deficiency in the production of agricultural products.

C. Consumers Field Survey:

419 Palestinian consumers were interviewed and a specialized questionnaire was filled out (Annexed in 3rd interim report). The project team built a methodology to select the consumers; mainly through calculating the total population for each governorate, distributing the number of questionnaires at the governorate through weighing the sample in relevance to its population number, and then divide the number of questionnaires specified for each governorate by three to cover all types of localities at the governorate level, namely urban, rural and refugee camps (see Annex 22 - Map 2, annex 23 - Table 6). The interviews were done with consumers who were selected randomly at the selected locality; the housekeepers were mainly the ones who were interviewed. In most cases females were interviewed since most of the housekeepers are the wives, mothers, or daughters staying during the day hours at the house. The females are also responsible for purchasing and managing the agricultural products at the household level. To diversify the consumer sample, field surveyors interviewed a random sample of consumers at retailer and wholesaler vegetables and fruits shops.

A training course was conducted for the consumer baseline field surveyors who were selected from the field surveyors list that ARIJ employed based on their experience in the field. Seven females and one male were employed to fill in the questionnaires (Annexed in 3rd interim report). Since this type of survey needed direct contact with the Palestinian households, it was more appropriate to select female field surveyors for this type of work.

Of the main project findings related to this objective is the following:

- The total consumption of surveyed agro-commodities reached 22.3 kg per capita per month. The distribution of average annual household consumption over the agro-commodities is as following: 42% of the consumption is of field crops, 40% of vegetables, 14% of fruit trees, and 4% of olive and olive oil.
- The average monthly household consumption of surveyed agro-commodities is higher in rural communities in comparison with household consumption in cities and camps. This is due to the larger household size in rural communities, and the household dependence on homemade food.
- According to the findings of the consumer baseline survey, the prices of the locally produced agro-commodities is in continuous increase; during the last three years (2011-2014) the prices of fruits increased by 15.6%, vegetables prices increased by 14.4%, and field crops and olive oil prices increase by 12% respectively.
- According to the consumer baseline findings, only 19.6% of surveyed households produce their own agro-commodities, yet not all of them achieve self-sufficiency of home-grown products. Only 4% of the per capita annual consumption of agro-commodities is provided from the family self-production.
- Price is the main factor that affects the Palestinian consumers' decisions when purchasing agricultural commodities. Therefore, consumption of agricultural commodities is highly sensitive to price fluctuations.

- This indicates that food intake patterns at the Palestinian household level depend mainly on the availability of low priced products at markets which reflects a general weak nutritive, health and food security status. It is worth noting that those households with high dependency ratio and less education attainment are the ones mostly vulnerable to food insecurity status. For example, up to 51% of the surveyed households indicate that their monthly income is less than 1500 NIS and in most cases they buy their agro-commodities from nearby market and defer payment till cash is available.¹¹
- Food insecurity is increasingly witnessed among the Palestinian households as average poverty rates and unemployment rates are in continuous increase in the Palestinian territory; reaching up to 25.8% and 26.7% respectively. Food insecurity affects more than 1.57 million Palestinian people (34% of Palestinian population) during the year 2012¹². It is also noted in the research study that household expenditure on food reached up to 40.3% of its total expenditure which indicates that accessing food is totally linked to the purchasing power of the Palestinian consumers and thus the poorer households are the ones mostly affected by changes on the level of food prices

D. Central Market Survey:

An initial wholesale central market survey was conducted during the first 6 months of the project but further research regarding this was conducted later during the second year of the project, where market channels, commodity flow, value added of locally produced commodities, export and import sectors of the selected crops and agro-commodities and other issues were all assessed. During this survey, the project team conducted a series of interviews with the targeted central markets' managers positioned at the relevant municipality in addition to interviews with a number of traders at the market, and the traders that leases the wholesale central markets (this is true in certain markets only depending on the managerial status of the market; in some markets the management is done by a trader who leases the whole market on a yearly basis from the municipality). These interviews were conducted for 11 central markets all over the West Bank; namely, the Hebron, Halhul, Bethlehem, Jericho, Ramallah, Qalqiliya, Tulkarem, Nablus, Beita, Jenin, and Qabatiya Central Markets (Annexed in 3rd interim report) (see Map 2).

The project team circulated the market factsheets to be filled out by the market manager to cover one year (in relevance to the latest agricultural year). It is important to note that most of the markets (81%) do not have a documentation system for the products that enter the market which left the project team unable to fill out the factsheets for 9 markets. This is one of the challenges that the project team faced in this survey. The quantities and type of products that enter the market was given to the project team based on estimates for the daily commercial trading for the crops (targeted in the project). Two markets had a basic type of documentation system where the

¹¹ Some traders allow customers to purchase commodities now and pay later. This is prevalent in communities with populations small in size, since most people know and trust each other.

¹² World Food Programme (WFP), Palestinian Central Bureau of Statistics (PCBS), Food and Agriculture Organization (FAO), and UNRWA (2013). Socio-Economic and Food Security Survey 2012. Palestine.

markets registered the type and quantity of products that enter the market on a monthly basis. Accordingly, the project team was able to fill out the factsheets for a 10 month period for those markets; specifically Hebron and Nablus Wholesale Central Markets. It is important to note that there is no other stakeholder that registers or controls the products that enter the market except the municipality, which in its turn is not interested to register as much as to estimate the value of the products that enter the market daily so as to return its fees accordingly. The challenges and recommendation are listed in the central markets report incorporated in the project publications mainly the booklet entitled: "Palestinian agricultural Production and Marketing between Reality and Challenges" (see Annex 8).

Of the main project findings related to this objective is the following:

- The Palestinian wholesale central markets average area is estimated at 7,500 square meters; where Hebron market is the largest with an area reaching up to 27000 square meters.
- The total number of workers in the central wholesale market of the West Bank is estimated at 119. The average number of workers per market varies between 3-25 employees.
- All central wholesale markets are under the provision of the local authorities as stated by the bylaw of central wholesale markets for vegetables and fruits. Some of these local authorities directly supervise and administer the market operations, while others lease the market on annual basis to a third party who is then responsible for the collection of fees.
- The percentage of fees collected on incoming and sold products varies from one market to another. But, the majority of the markets do not exceed the maximum 4% fee specified by the Palestinian bylaw.
- Overall, 82% of the surveyed vegetables imported to the market come from local sources, whereas 71% of the surveyed fruits come from the Israeli market. For field crops, almost half of the received quantities (49%) are locally produced, while the rest is imported from Israel.
- Field survey results reflect that the monthly average quantity of incoming agricultural products is 2,964 tons per market. This quantity varies based on the size of agricultural production available in each governorate, and the demand on these products by residents
- The markets of an urgent need for the creation of a legal body whose main task would be to supervise operations in central wholesale markets, and unify the percentage of collected fees in all central wholesale markets.
- There is a necessity to reinforce the supervisory role of local authorities, and reconsider the leasing of markets, in addition to hiring adequate and specialized staff that can maintain and manage the market's operation in an efficient and effective manner.
- The majority of central wholesale markets do not have registration systems. Thus, markets need to establish unified market information system.
- Most central wholesale markets lack packaging facilities; since most traders depend on the basic packaging taking place at farm level.

E. Traders Baseline Survey:

The project team conducted a survey for agricultural wholesalers and retailers during the period of November until December 2014. The survey included field visits to central wholesale markets and agricultural retail shops in the different governorates of the West Bank. The baseline survey was done after specifying the list of traders' names to be surveyed. The names were collected from the project partner; the Ministry of National Economy. The total number of registered traders and their trading type were also collected from the Palestinian Central Bureau of Statistics data. 150 interviews were conducted with wholesalers, retailers and middlemen functioning in both central wholesale markets and retail shops of agro products. Interviews were conducted with traders in order to understand the various mechanisms that regulate their operations, including: the mechanisms for purchasing agricultural products; networks and relationships between retailers, producers and consumers; targeted markets; pricing mechanisms and profitability; packaging and grading processes. In addition, the interviews included a discussion on challenges that these traders face.

The 150 traders were selected based on their legal registration status among governorates. 50 wholesalers from central wholesale markets, 50 retailers selected randomly, and 50 registered and unregistered retailers contacted based on recommendations from farmers surveyed by ARIJ under another project activity. In addition, the survey targeted a sample of Arab traders working in Israel within the green line area. (See Annex 23 - Table 7)).

Surveying the agriculture traders was in general challenging since most of them were not interested in dealing with the project team or surveyors. They were in general secretive concerning their work in general, concerning the amount of products they are dealing with, the products' sources and the prices sold per product in particular. This made the project team work challenging and every time the traders refuse to cooperate the team was obliged to put contingency plan by finding new ones with the same legal status. An awareness campaign was also conducted for this sector, again their attendance was weak since most of them confirmed their attendance but did not show up on the day of the training. The excuses were mainly that they do not have time and that they do not trust that any party would change their status since their main problems are either getting cheated by other traders or middlemen from both the Palestinian and Israeli sides, or they find themselves unable to trade outside the West Bank region because of exportation restrictions imposed on trading processes in general, and sometime have difficulties trading inside the West Bank as a result to the high number of check points. The project team found that their problems can be solved if they understand better their legal status and the possibility of trading under written contracts instead of oral contract with dealers. In addition, they could improve their grading, storage and packaging processes to ensure better local trading and exportation opportunities; in addition to a number of other recommendations provided by the team in the project publications. The analysis and research findings can be accessed through the project publications namely the Booklet "Palestinian agricultural Production and Marketing between Reality and Challenges" (see Annex 8).

Of the main project findings related to this objective is the following:

- Most surveyed wholesalers indicated that they rely on the farmer who delivers his/her own production to central wholesale markets. On the other hand, retailers purchase their stock of products from wholesalers located within central wholesale markets then deliver them to their stores.
- Traders use 2 main methods to pay for agricultural products: (1) cash paid directly to farmers, other traders or middlemen. This method is used by 66% of surveyed traders. (2) Scheduled deferred payment, and is used by 34% of surveyed traders.
- 44% of surveyed traders target the northern governorates, 30% target the middle governorates, while the remaining 26% target the southern governorates. Traders base their decision of which governorate to target based on the demographic characteristics, and the prevalent lifestyle and diet trends in each governorate.
- There are no rules that oblige the trader of fixing or determining the prices of agro commodities. Prices tend to change on daily or monthly basis, due to the following reasons (presented in terms of importance): supply and demand, seasonality, weather conditions, and the number of competitors.
- 8% of agro products on the traders' end get spoiled on a monthly average and traders use no packaging or grading systems (in most cases).
- The value of exported agro products surveyed in the project was estimated at \$25,571,000, while Imports of agro products surveyed in the project were estimated at \$76,797,000¹³. Palestine is currently a net importer of agro commodities
- Of main challenges that face Palestinian traders are:
 - High cost of transferring and storing agricultural products,
 - Lack of legal protection or legal resources that works on protecting the Palestinian traders from fraud during the exporting of agricultural products to Israeli or international markets,
 - Poor infrastructure at central wholesale markets in the West Bank, such as the unavailability of parking lots, and refrigerator storehouses for the storage of agricultural products,
 - Lack of high-quality packaging and grading systems, therefore reducing the competitive advantage of Palestinian agricultural products

F. Processors Baseline Survey:

The project team conducted several interviews with food processors cooperatives and factories, which depend in their production processes on agricultural crops surveyed under the activities of the FPCA project. Accordingly, 23 interviews were conducted with a sample representing almost 4% of food processing factories and cooperatives in the West Bank governorates. These interviews aimed at analyzing the sources of inputs, production mechanisms, and the main actors in the supply chain of processed foods, in addition to understanding other issues such as pricing, profitability, packaging and grading, and the sector's major challenges.

¹³ Palestinian Central Bureau of Statistics (2015). Unpublished raw data.

The project team could not collect factsheets from the surveyed factories since they emphasized that they can provide the team the requested data on monthly basis because they consider their work as a private business and they have the right to keep their information not published especially concerning their commercial trading activities. The cooperatives do not keep records for their productions and thus emphasized their need to support from skilled/specialized party to increase their awareness concerning such issues. This was taken into consideration when the project team conducted the awareness sessions for the processors where an awareness material was given to them that include information about the processors' procedures in their trading, their main challenges and the potential for their trading/service improvement. All awareness materials were uploaded on the project blog on ARIJ website (<http://www.arij.org/index.php/publications/market-information-system>).

Of the main project findings related to this objective is the following:

- The number of processing companies that work in the processing sector depending on the fresh agro- products that the project is surveying is 45 companies distributed on different types of processing industries such as industry of jams, pickles, oils, and flour. The total number of workers in the surveyed companies reached up to 1165 workers.
- Sources of agro products for processing vary among factories depending on the size of production and the number of production lines. For example, survey results found that 70% of wheat used for the production of food commodities is imported from foreign markets (specifically Russia and the United States of America). Olive and olive oil used in food processing come from local sources. This also applies to cucumbers, dates, tomatoes, eggplants, almonds and grapes. Between 50%-70% of the supply of potatoes and citrus fruits used in food processing is imported from the Israeli market.
- Other surveyed agro products like guava, paprika, squash, green beans and onions are considered secondary inputs in the food processing industry, and are therefore purchased in very small quantities.
- 78% of food producers market their production in the Palestinian local market and 52% export their products to Arab and international markets.
- The channels most frequently used for the delivery of processed food commodities to markets were agents & distributors (33%) or middlemen & wholesalers (33%).
- Of the main challenges face this sector are:
 - High cost of inputs of agro products, due to fluctuations in their available quantities
 - Barriers to entry into new markets due to the high costs of exporting
 - The limited local market size and its inability to absorb all local production
 - High cost of transportation, delivery and storage

G. Role of Woman along the Agriculture Market Value Chain:

Palestinian woman play a clear role in the agriculture sector. According to the research findings, women form 31% of the agriculture labor force; as it is known that the agriculture sector is one of the sectors that mostly employ women in the West Bank region (women forms 33% of agriculture labor force according to the PCBS¹⁴). In addition, the role of woman along the

¹⁴ Palestinian Central Bureau of Statistics (PCBS) (2012). Agriculture census - 2010. Ramallah, Palestine.

agriculture market value chain is mainly vibrant in two market chains; the production and the processing chains. At the production stage, woman highly contributes in the cultivation processes from preparing the land to harvesting the crops. She decides with her husband or son what to cultivate at the agriculture season, she also helps during the cultivation process itself; such as in purchasing the agriculture inputs, seeding, irrigating, fertilizing, and others. However, her role does not appear clear in the national statistics since the husband (the farmer in this case) show up in her place during the surveys and thus her work is always considered part of the family labor (in most cases she does not earn a wage). Her contribution to the agriculture labor is mostly considered part of the informal labor force. According to PCBS, 8% of the agriculture holdings are owned by Palestinian women and the women's average daily wage is 57.8¹⁵ NIS in comparison to 62.4 NIS paid for men.

The Palestinian woman tries to find marketing approaches for her product, but it is in most cases difficult especially when we talk about dealing with wholesalers or retailers who prefer to deal with a man instead, but women succeeded in selling their products directly to other women living in the nearby neighborhoods or villages. According to the consumer baseline survey, the purchase decision at household level in relation to the type and source of agro-products is affected by the opinion of the farmer-women who sell their agriculture products directly to them. Thus at marketing level, women either sell their products directly to their neighboring households, in public exhibitions and festivals, or through selling in the city centers on the streets during day hours.

On the other hand, woman plays important role in the agro-food processing chain either as an individual or in groups through centers, women agriculture or marketing cooperatives. According to the survey, women process different types of agriculture products either those that she cultivates herself or she purchase from another woman who cultivates her land or from central wholesale markets. Women process different types of agro-food depending on availability of that agro-product either in the market or at the farm. Thus, the project team finds variation in type of processed agro-food along the West Bank Governorates. For example, women living in the northern governorates of the West Bank are famous for processing cucumber pickles since cucumbers are highly available and found in good prices (91% of total cucumber production at the West Bank level is coming from northern governorates), however women living in southern governorates of the West Bank tend to process jam mainly from figs or grapes since both are highly available in the south (up to 85% of grapes production at the West Bank level is coming from the southern governorates). The Palestinian woman also affects the processing procedures since she decides the source and quality of raw material that she prefers to buy (sources of purchase for the fresh agro-products is mentioned above). In general women tend to buy raw fresh products in reasonable prices so as to gain better profit at the end. Thus, women contribute to the total Palestinian agriculture added value through cultivating their land, selling their fresh agro-products and/or selling their processed products.

It is important to note that Palestinian woman working in the agriculture sector faces several challenges mainly in relation to the Palestinian heritage system which inherits the agricultural lands for the man (son or brother) but not the woman which keeps the percent of women owning agriculture holdings very small (8%). On the other hand, the Palestinian woman cannot enter the

¹⁵ Palestinian Central Bureau of Statistics (PCBS) 2015. Palestinian Labor Force Survey: Yearly Report 2014. Ramallah, Palestine.

market as a trader (wholesaler or retailer), since this is not acceptable when referring to traditions; which limits her mobility especially among men-traders. This cause weakness in women's skills in marketing and in setting agreements with traders and thus women would prefer to sell their products directly to a consumer. In addition, women still need training in managerial issues related to administering processing projects such as setting prices, understanding the capacity of the market in absorbing their products, they also need training in packaging. It was also found in the research that women centers, clubs and cooperatives usually lack equipment necessary for processing, which limits their production size.

It is worth noting that all baseline surveys conducted for the project were well prepared for, where questionnaire templates, methodologies, action plans and beneficiaries selection, were all consulted with the project partners and Regional Committees; findings of each survey were shared with them and their feedback on the results was taken into consideration. Findings and recommendations for each baseline survey were shared with the surveyed farmers, traders, processors, and consumers through awareness sessions conducted after the analysis, revision by partners and Regional committee members and reporting phase of each baseline survey.

(The analysis and findings reached based on the implementation of the different baseline surveys comes in response to the AFS outcomes- Research groups, food processing and storage, Food distribution and gender section – Annex 1).

Objectives (5): To share and disseminate the results at the main decision-making level and other related stakeholders; in order to enhance awareness and cooperation among different stakeholders to improve local farm production, food trading market, and access to agro-food markets for both producers and consumers.

- A. The Partnerships built with two main Authorities (MoA and MoNE) responsible for the research sector and the formulation of committees at all levels including national and regional levels was a very successful method to a continuous communication with relevant stakeholders. This was important along the project where the project team ensured the decision makers involvement in the project processes including data review and approval, feedback and recommendations. The project team was also successful in raising the voice of the different sectors' players to reach the relevant decision makers through the workshops, interviews, media sessions, and research studies provided or conducted with decision makers.

B. Oriented awareness sessions and advocacy amongst different stakeholders from the farming, producing, trading, and consuming communities

Upon the finalization of the project baseline surveys and concluding the findings of each research including the main challenges and potential recommendations a series of awareness sessions were conducted to different market channels and stakeholders, in addition to series of reports and articles were published and a series of Radio and TV flashes and sessions were broadcasted.

Awareness campaigns:

Up to 11 awareness sessions were conducted during the second year of the project targeting the different market chains including the farmers, traders, processors and consumers. Each market chain was given attention, where three awareness sessions were conducted covering the three regional parts of the West Bank from the north to the south. In each awareness session several issues were taken into consideration including providing the participants with awareness material presenting the findings and results of the baseline survey of relevance, discuss the challenges that face the sector as identified by surveyed market channels (either farmers, traders, processors and consumers), and the potential recommendations and interventions to improve their working environment and ensure better Palestinian marketing system in general.

- Up to 56 participants attended the two awareness sessions conducted for Palestinian surveyed consumers, where up to 91% of them were females (see annex 12).
- Up to 121 participants attended the three awareness sessions conducted for Palestinian surveyed farmers, where up to 19% of them were females (see annex 9).
- Up to 30 participants attended the three awareness sessions conducted for Palestinian surveyed traders, where up to 3% of them were females (see annex 11).
- Up to 50 participants attended the three awareness sessions conducted for Palestinian surveyed processors, where up to 68% of them were females (see annex 10).

The three sessions were done on the northern, centre and southern parts of the West Bank and the awareness material distributed at participants were also specialized in the area where each session was conducted taking into consideration not only the general findings but also the findings related to the studied region.

Advocacy through Media:

Materials to be broadcasted through Radio and TV channels were prepared to include the following:

1. Four Radio flashes were broadcasted in Baladna Radio; local Radio channel that covers the southern part of the West Bank but also have connections with other local Radio channels that have coverage range over the whole West Bank region. The flashes were specialized messages oriented to the surveyed market chain including farmers, traders, consumers and whole central Markets. For each market chain four to five recommendations were set in a radio text form and broadcasted every day for a whole month (April 2015) (see Annex 13 for Radio schedule and the following links for messages.
 - Farmer Radio Flash: <https://youtu.be/2QiuFRzsgbo>
 - Trader Radio Flash: <https://youtu.be/yX-nfS1vwHY>
 - Market Radio Flash: <https://youtu.be/fX-3qTZ8sMo>
 - Consumer Radio Flash: <https://youtu.be/hs8akE9CW0w>

The Radio flashes were also broadcasted as a text messages on a stereo-belt broadcasted on TV in different TV shows including social and cultural programs. Example on the news belt is on http://youtu.be/AIX_SwYM9do.

2. A TV session was broadcasted about the project and its final workshop was broadcasted on Ma'an TV channel and its partner channels all over the West Bank. TEH final workshop

was fully recorded from which 2 minutes were montage and broadcasted on the TV news namely:” the News in One Hour”.

- <https://www.youtube.com/watch?v=Z9BptPijfis>
- <https://www.youtube.com/watch?v=tc8ufSVA7Hg>

Articles and Reports:

1. Six newspaper articles were published in Al Ayyam newspaper where each article summarized the findings of the relevant baseline survey highlighting the potential solutions for the challenges that face each market chain. The six newspaper articles as published in the Al Ayyam newspaper are found in Annexes 14, 15, 16, 17, 18, and 19.

The newspaper articles were also published on Baladna webpage as following:

Trader article: <http://www.baladnafm.ps/baladnafm/21241>

Market article: <http://www.baladnafm.ps/baladnafm/19386>

Consumer article: <http://www.baladnafm.ps/baladnafm/19768>

Farmer article: <http://www.baladnafm.ps/baladnafm/21241>

The articles were also uploaded on the project blog on ARIJ webpage.

2. Six executive reports were published in Arabic and English in a booklet entitled:” Palestinian Agricultural Production and marketing between Reality and Challenges”. The full reports were published in Arabic on ARIJ project blog.

The Executives were published under the following names:

- The Palestinian Farmer: Production Analysis and Challenges
- The Palestinian Trader’s Role in the Value Chain of Agro- Commodities
- Central Wholesale Markets in the West Bank
- The Food Industry Sector in the West Bank
- Palestinian household Consumption trends for Agro-Commodities
- The Palestinian Agriculture Production-Consumption Calendar for Fruits, Vegetables, Field Crops and Olive oil (agricultural year 2013/2014).

3. Up to 14 value chain flyers were produced for each surveyed crop; integrating and linking the findings of all the surveys in relation to the surveyed crops. The flyer includes information about a specific surveyed crop in terms of its cultivated area, production amounts and values, profit margin, exports and imports, percentage of spoilage, consumption rates per governorate, consumption growth rate, prices per governorate, and price rate, production-consumption calendar, and the value chain diagram from the farmers until the consumer, including data on production (quantity in ton and value in USD \$) along the value chain (see Annex 24).

C. Decision Makers brain storming session:

A brain storming session was conducted for a number of relevant decision makers from mainly MoA, MoNE, and Ministry of Local Governance (MoLG) on the 24th of March 2015. This meeting was one of the most important since it gathered those decision makers who are aware about the

needs of the studied sector, they also have authorities to change and influence the national policies, and they are also an important communication chain between the stakeholders and the ministries (see Annex 20). The press release for this workshop can be accessed on the following link:

<http://www.arij.org/index.php/latest-news/675-decision-makers-press-release-2015>

Attendance was diverse including personnel from the following Ministers' departments:

- MoA: Market, planning and statistics departments. In addition to the attendance of the Minister Deputy Assistant.
- MoNE: Industry, Consumer protection and Studies departments.
- MoLG: Public Relations

The meeting was very successful since it was a place to introduce the project and its main findings to this level of decision makers. The project team highlighted several issues but mainly the market chains' challenges, and potential solutions. A discussion was opened about the methodologies used for each baseline survey, how much the results are close to reality and what should be done later as a response. The support of the two partners was of great importance at this stage which gave full credit for the project and its information. All attendance asked for the research study. At the end a task force was initiated of the same group of stakeholders to follow up the potential response plans to improve the market sector at the West Bank level. It is supposed that this task force has a follow up meeting (soon end of May) to discuss the priorities of the market sector in need and the interventions that are possible to accomplish.

D. Final Workshop:

A final workshop was conducted on the 31st of March 2015, under the auspice of his Excellency the Minister of Agriculture, Mr. Shawqi El A'yassa and the deputy of Ministry of National Economy Dr. Tayseer A'mer, In addition to the attendance of the IDRC representative, Dr. Susan Robertson. The workshop was opened by speeches from each Ministry and then by the IDRC and ARIJ. The project and its importance at the national level were highlighted, the findings and potential solutions at all levels were presented and the publications were distributed. A discussion was opened and recommendations in general were recorded for the upcoming step upon the finalization of the project. This event was given a special care since most of the relevant stakeholders attended and the aim was not only to introduce the project but also to introduce the potential interventions that might improve the Palestinian market at the national level and at the market chain level. Accordingly, ARIJ project team prepared a press release that was published in different newspapers including Al Quds and Al Ayyam (see Annex 21). In addition the press release was published in several media channels ad web pages; in brief as following: ARIJ webpage: <http://www.arij.org/index.php/latest-news/677-closing-ceremoney-2015>
Radio Baladna webpage: <http://www.baladnafm.ps/baladnafm/21357>
Palestine News Network (PNN): <http://www.pnn.ps/index.php/local/121718>
Ma'an News: <http://www.maannews.net/Content.aspx?id=770027>
Al Quds News: <http://www.alquds.com/news/article/view/id/552346>

(The reporting, brain storming sessions, media sets done in the project comes in response to

the AFS outcomes- Research groups, Policy options, Information and Communication Technologies (ICTs) and Gender section).

(An Updated list for the AFS outcomes can be found in Annex 1)

Of particular interest regarding the results, is the understanding and enthusiasm that the project team found among the different stakeholders and mainly among the project partners MoA and MoNE. Both were involved in the project implementation on a daily basis. They were involved in setting all types of project methodologies, in questionnaires' templates preparation, in listing the traders and processors, nominating the members' for facilitator and regional committees, participation in all project meetings and workshops and supporting and leading the discussions initiated at the meetings. Both consider the study a product for their ministry, to adopt and forward to the minister himself.

It is important to note that the findings of the project were well approved by relevant stakeholders and found necessary to build on for upcoming interventions. At the end of the project the relevant stakeholders emphasized the importance of understanding and evaluating the status and challenges of the agro-commodities market chains upon which the project clearly highlighted in its research study and suggested recommendations. In relevance the stakeholders are convened that several interventions should be considered as following:

1. Increase the involvement and supervision of relevant stakeholders along the agriculture market chain in an attempt to benefit all players along the chain and at the end improve the agriculture sector and access of households to quality food.
2. Find new niches for agro-commodities marketing at both local and international level.
3. Improve the preparations phase for marketing the agro-products basically through improving the grading, packaging and storage facilities.
4. Increase awareness of the different market chain players concerning the potential opportunities for better cooperation among each chain, the best tools to organize their management and to know better how to use the law to serve their needs and protect their rights.
5. Work on supporting the production phase through better management tools for issues related to the agricultural inputs, natural disaster, and marketing.
6. Regulate the work of the Wholesale central markets through formulating a body mainly from MoA and MoNE and MoLG to follow up and supervise the work of the markets, the flow of commodities, the pricing system, etc. and if possible to support the facilities (storage rooms, refrigerators, sanitation facilities) and others.
7. Establish a Market Information System that connects to the different market chain stakeholders; in attempt to gather enough and representative information about the marketing system in Palestine to better control and improve the status of the market.

Several other recommendations were concluded from the project that should be prioritized in participation with the decision makers to better follow up the potential uptake of the project.

5. Problems and Challenges (1 page):

Of the main problems and challenges that faced the project during implementation is as following:

1. *Dealing with the project partners*

One of the main challenges facing the project team is the coordination needed with project partners and committees. Although both partners, MoA and MoNE, in addition to facilitators' committee members and regional committees' members are very concerned about the project, the coordination, communication and networking with all parties made the accomplishment of the project activities (with relevance to the project schedule) a challenging aspect. It is worth noting that each partner wants to impose his procedures/methodologies onto the project so that it may result in successful outcomes according to his perspective. In addition, the nominated representatives at both ministries are currently directors, which mean that they are occupied with other work at the ministry level, leaving very limited space for the project. This put pressure on the team to advance the progress by taking decisions during all project stages. Coordination for meetings is also another issue that needs careful consideration. This type of involvement caused delays in accomplishing some of the activities, but this involvement at decision making level is crucial to the project mainly because such involvement ensured the adoption of the project and its outcomes by the decision makers upon accomplishment. The position of this project as a leading project in the field of crop-market assessments at the Palestinian national level is one of the main deliveries at the level of this project.

2. *Lack of a system and information*

It is difficult to collect information at any level from the stakeholders, since data organization and refining at the ministries level is limited and weak. Even if data is available, rigorous procedures are required before being able to obtain it. This is in addition to the clear inconsistency in information produced by the MoA, MoNE and the Palestinian Central Bureau of Statistics (PCBS). At the Central markets and traders level, the data was difficult to collect. One of the main problems was that most of the markets do not have a registration system that keeps track of the quantities, prices and sources of incoming agricultural products at the market. In some cases the traders and market workers refused to share specific and accurate information about the quantities and prices of the products they receive or sell at the market. There is no mandate for the MoA or MoNE to monitor the operations at the market, which led to the unavailability of information of incoming agro-products to the markets. This obliged the project team to conduct a series of interviews with traders at the markets to enlarge the range of the interviews to get accurate and wide ranging data. It was also difficult to reach the wholesale markets' administration, traders, and food processing factories' administration since most of them are very busy during the day and some had to be visited very early in the day or revisited several times during the survey.

6. Recommendations (1 page):

The administration of the IDRC staff and the coordination with them was very well established and efficient during the implementation of the FPCA project.

Of the main recommendations is to reduce the number of progress reports necessary to submit to IDRC along the implementation of the project, since this procedure keeps the project team busy with the preparation and gathering of facts to be reported in those progress / interim reports.

It would be interesting if IDRC staff would share with us other success relevant project, stories and research findings implemented in other countries so as to gain knowledge and exchange experience with them.