Technical Report

TRAINING COURSE
ON

Survey Design, Data Management and Analysis, and Business Plan Development

18 – 22 July 2016 – Tunis - Tunisia

July 2016

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EXECUTIVE SUMMARY

Name of the Project Associated to the Training Workshop

Provision of Proven Feed Resources Technologies to Improve the Red Meat Value Chain in Tunisia

Name of the Training Workshop

Survey Design, Data Management and Analysis, and Business Plan Development

Venue and Location of the Training Course

Institut National Pédagogique et de la Formation Continue Agricole de Sidi Thabet- Tunisia

Schedule of the Training Workshop

18 – 22 July, 2016

Organization of the Training Workshop

Office of Livestock and Pasture – OEP-Tunisia

International Center for Agricultural Research in the Dry Areas (ICARDA)

About the Trainers

- Dr Boubaker Dhehibi (SIRPS Program – ICARDA-Amman: b.dhehibi@cgiar.org)
- Mr Udo Ruediger (CIM – ICARDA-Tunisia: u.rudiger@cgiar.org)
- Dr Ali Nefzaoui (Consultant - ICARDA – Tunisia: a.nefzaoui@cgiar.org)

Purpose of the Training Workshop

To enhance Capacity Development of OEP government officials and researchers who are engaged in the project on "Provision of Proven Feed Resources Technologies to Improve the Red Meat Value Chain in Tunisia".

Training Course Learning Objectives

Up-to-date knowledge and enhanced capacity in the two following thematic areas:
1. <u>Surveys design, data management and data analysis</u>
- Concepts of farming system research approach
- Households characterization and livelihoods measurements
- Farm surveys methods
- Questionnaire and survey design
- Data management and data analysis using SPSS software
2. <u>Business plan development</u>
- Theoretical introduction of a business plan
- How to write a business plan for a start-up business?

Training Workshop Specific Objectives

- Developing and reinforcing participants' knowledge and understanding of data collection, management and analysis
- Expand on key skills that empower participants to assess, better formulate and helping on the design and write a business plan for a start-up business
- Stimulate cooperation between ICARDA, GIZ and OEP (networking and benchmarking)

Training Workshop Outline

The training was focusing on the following thematic areas / components:
- o Concepts of farming system research approach
- o Households characterization and livelihoods measurements
- o Farm surveys methods
- o Questionnaire and survey design
- o Introduction to statistics analysis using SPSS software
- o Data management and data analysis using SPSS software
- o Theoretical introduction of a business plan (BP)
- o How to write a business plan for a startup business
- o Case studies of business plans
- o Field visits to launch the baseline survey and to validate the identified BPs

Training Workshop Structure

- This training workshop was designed to be interactive and participatory
- Sharing field-based experiences with the participants
- Training methods and activities:
  - o Comprehensive approach, including intensive theoretical lectures
  - o Exercises in plenary and small groups to help you apply some of the course themes (survey design, business plan development, data analysis, data interpretation, etc.)
  - o Extensive reading list (all topics): Designed as references for the participants
  - o Field visit and discussion with farmers in order to learn on how conduct survey in the field

Training workshop Outputs

Around 26 professionally-trained OEP-NARS partners (12 females) on survey design, data collection, data management, data analysis using SPSS software, business plan development (How to write an interpret the components of a business plan for a startup business on animal feed block making machine) In addition to the 26 participants, four (4) identified entrepreneurs attended the last training day and shared their experience and idea on how developing a business plan for feed blocks in their respective regions.

Training workshop Outcomes

- Design, implement, manage, analyze and report on research in development (RinD) in: (i) Surveys design, data collection, cleaning, management, and analysis, and (ii) Business plan development
- Knowledge of survey design, data collection, management and analysis using SPSS software
- Acquire up to date information on writing a business plan for a startup business with special emphasis to the business on feed blocks machine
- Allow and provide opportunity for participants to establish, expand their networks, exchange experiences and strengthening their ties with GIZ and ICARDA

General training course evaluation

Various evaluations were carried out during the course, including a specific evaluation for each part of the course. Issues considered were the topics and thematic areas of the course, the trainers and the organization, as well as general suggestions. In summary, regarding the overall assessment of the training course, most of participants qualified it as very good (52 %) and good (36 %), 12 % evaluated it as excellent. Participants expressed their interest in giving more time for working groups and open discussions. In addition, they express their willingness to have long term specific course on data analysis using SPSS software and to have specialized software on business plan development

GENERAL OVERVIEW

The quality and quantity of forage produced coupled with the unbalanced feeding of livestock, in rural Tunisia is not sufficient and stable enough to ensure high quality red meat production. This is a lost opportunity that can be addressed through the adoption of diversified feeding regimes that are based on locally produced feeds and by-products. The project "*Provision of Proven Feed Resources Technologies to Improve the Red Meat Value Chain in Tunisia*" is offering an integrated package of successfully tested proven technologies of locally adapted feed and forage supply, combined with extension services and organizational support for smallholder farmers as well as business development support for local manufacturers.

In order to assess the relevance of these interventions (proved technologies) and their impact on livestock production, and on rural livelihoods, ex-ante and ex-post assessment (analyzing of the target farming system, households characterization and livelihoods measurements, comprehend farm surveys methods; questionnaire design, sampling and sample procedures, and establishment of measurable indicators) and understanding the development of business plan for this project is therefore a vital tool. It can enumerate the potential costs and value the anticipated benefits of a proposed program on target group livelihoods.

It is within the planned activities of the above project, a training workshop targeting the Tunisian Livestock and Pasture Office staff involved in the said project on "*Survey Design, Data Management and Analysis, and Business Plan Development*" was delivered.

The training was implemented under the patronage of HE Dr. Ahmed Al Bakri, the Undersecretary of the MAF in Tunis (*Institut National Pédagogique et de la Formation Continue Agricole de Sidi Thabet*) – Tunisia from 18-22 July 2016.

This course offers a comprehensive training programme to cover precisely this by building upon and sharing the expertise and experience of the ICARDA experts and the participants to the training workshop. In a period of one week, the course provides the participants from OEP with the knowledge and skills necessary to engage in economic assessment of technologies implemented by the project, adoption and impact assessment of such. The course offers also the opportunity to understand the importance of business planning, defines and describes the components of a business plan, and provides access to sample plans and resources that can help to develop a very good business plan with special emphasis to the business on feed blocks machine

PURPOSE

The purpose of the above training course was the development and enhancement of the participant's theoretical and contextual knowledge regarding the following topics: Surveys design, data management and data analysis (including concepts of farming system research approach; households characterization and livelihoods measurements; farm surveys methods; questionnaire and survey design, and data management and data analysis using SPSS software) and business plan development (with special focus on the theoretical background to understand the concept of a business plan and the process on how to write a business plan for a startup business such as producing feed blocks using more developed process). This course therefore was designed to ensure that OEP participants reach the following objectives:

- Developing and reinforcing participants' knowledge and understanding of survey design, implementation with livestock farmers, data collection, management and analysis
- Expand on key skills that empower participants to assess, better formulate and helping on the design and write a business plan (BP) for a startup business (with special emphasis to feed block machines)
- Stimulate cooperation between ICARDA, GIZ and OEP (networking and benchmarking)

TARGETED AUDIENCE

The target audience for this course is the staff of the Tunisian Livestock and Pasture Office (OEP) both at national and regional level as part of the above project. This gave an opportunity for the trainers to emphasize the importance of collaboration among policy makers and technicians, and the aspects that both need to take into account when developing and designing harmonized strategies and policies for the dissemination and scaling-up of agricultural technologies implemented by the project (feed blocks, forage seeds, and ensilage). In addition to provide a practical framework to measure and develop indicators from a baseline survey to be used later as reference to study the impact and the effectiveness of the project interventions and to acquire the necessary skills to write and interpret a business plan, in general and for feed blocks manufacturing unit, in particular.

ORGANIZING COMMITTEE

ICARDA

Dr. Boubaker Dhehibi (Amman – Jordan: b.dhehibi@cgiar.oeg)

Dr. Mounir Louhaichi (Amman - Jordan: m.louhaichi@cgiar.org)

Dr. Ali Nefzaoui (Tunis – Tunisia: a.nefzaoui@cgiar.org)

Mr. Udo Rudiger (Tunis – Tunisia: u.rudiger@cgiar.org)

OEP – Tunisia

Mr. Fethi Gouhis (Tunis – Tunisia: fethioep07@yahoo.fr)

TRAINING WORKSHOP STRUCTURE

Course instruction was organized through tutorial and practical sessions, which provided participants with hands-on experience on two topics: The first one focuses on questionnaire and survey design, data collection and interviews – test of the designed survey in the field with farmers, statistical analysis and data management and interpretation using SPSS software. The second topic covers the concept of business plan (theoretical steps for writing an attractive business plan, understanding the main elements of this plan, case studies on how to write a startup business such as feed blocks machine). The training workshop was concluded by a field visit to one of the project target site in order to launch the baseline survey and to validate the identified BP (see Annex I).

This training workshop was designed to be interactive and participatory – discussion, and debate was stimulated. It was an invaluable opportunity for meeting, exchanging and debating current topics on economics of animal feed resources, data management and analysis, and business plan development. The training workshop methods and activities are summarized as follows:

- o Comprehensive approach, including intensive theoretical lectures
- o Exercises in plenary and small groups to help you apply some of the course themes (data management and analysis using SPSS, BP's)
- o Presentation of case studies by participants (Feed blocks production using industrial machines)

The course covered the following themes / sub-themes:
- Theme I: Surveys design, data management and data analysis (Lectures + Exercises + Practical session using SPSS software)
  - o Concepts of farming system research approach

- o Households characterization and livelihoods measurements
- o Farm surveys methods
- o Questionnaire and survey design
- o Data management and data analysis using SPSS software
- Theme II: Business plan development
  - o Theoretical introduction of a business plan
  - o How to write a business plan for a startup business?
  - o Case studies of business plans
- Theme III: Field visit and discussion with farmers
  - o Learn on how conduct survey in the field (meeting and testing the baseline survey) with the participation of the project team
  - o Visit the local of one of the identified entrepreneur
  - o Allow the participants to see the feed blocks machine and understand its functioning process.

TRAINING WORKSHOP IMPLEMENTATION

The part regarding the course instruction was delivered by three scientists from the Sustainable Intensification and Resilient Production Systems (SIRPS – SEPR) Program from ICARDA (Annex II).

Around 26 professionally-trained OEP-NARS partners (12 females) on survey design, data collection, data management, data analysis using SPSS software, business plan development (How to write an interpret the components of a business plan for a startup business on animal feed block making machine). In addition to the 26 participants, four (4) identified entrepreneurs attended the last training day and shared their experience and idea on how developing a business plan for feed blocks in their respective regions (see Annex III). With respect to the field visit, about 13 participants attended this field day (see Annex IV).

Three thematic areas were covered by this training course: (i) Surveys design, data management and data analysis using SPSS; (ii) Business plan development (understand how to write and interpret a business plan for manufacturing feed blocks unit), an (iii) Implementation of the survey with the livestock farmers at the field.

The training was conducted and implemented jointly by the ICARDA North Africa Office (ARPRP) staffs, the Social, Economic and Policy Research team (SEPR) from the Sustainable Intensification and Resilient Production Systems Program (SIPRSP), the Capacity Development Unit (CDU) Staffs in the International Center for Agricultural Research in the Dry Areas (ICARDA) with the collaboration of Office of Livestock and Pasture in Tunisia (OEP-Tunisia). The venue of the training the *Institut National Pédagogique et de la Formation Continue Agricole de Sidi Thabet*- Tunisia.

GROUP ASSESSMENT

Given the main outcomes of the training are to understand the importance and enhancing knowledge and skills of the following areas:

(i) Design, implement, manage, analyze and report on research and development in the economic assessment and adoption of agricultural technologies implemented by the project (conduct baseline survey – Ex-ante indicators and conduct end line indicators – Ex-post indicators - After the project interventions)

(ii) Develop a business plan for a startup business: Manufacturing unit of feed blocks (for the identified potential entrepreneurs)

(iii) Acquire up to date information on research and practical activities in economic assessment of the project implemented agricultural technologies in each target site.

The selected participants are fully involved in the ***Provision of Proven Feed Resources Technologies to Improve the Red Meat Value Chain in Tunisia*** project. Thus, the post-training assessment, based on groups discussions and interactions, where participants were asked to record the most relevant information from the sessions and explain how they were going to apply this information for the deliverables of the project. Results from this exercise showed a significant increase in the participants' understanding of the basic skills on surveys design, data management and data analysis (using SPSS software) and business plan development for manufacturing unit for feed blocks in 4 specified regions of the country. Generally, results from the group discussion, evaluation and interactions during the field visit indicates that the average participants' understanding of all delivered topics is quite high and satisfactory.

GENERAL TRAINING WORKSHOP EVALUATION by TRAINEES

Various evaluations were carried out during the course, including a specific evaluation for each part of the course. Here we present an overview of the final evaluation. Issues considered were the topics and thematic areas of the course, the trainers and the organization, as well as general suggestions (Annex V).

Regarding the overall assessment of the training course, the participants qualified it as excellent with very high scoring (4.3 over a maximum of 5). Participants expressed their interest in giving more time for practical session using SPSS software, working groups and open discussions. In addition, they express their willingness to have long term specific course on data analysis using SPSS software and to have specialized software on business plan development.

Taking into account the topic of the course, the participants considered that the accomplishment of the subject matter was comprehensive (with a scoring of about 4.0), the level of the lectures was quite advanced (4.2) and the delivered material was adequate (4.2). Some of them commented that the varying experiences among participants were good, and that it would have been useful that the training workshop is divided in two specialized courses: The first one dealing with data management and analysis using SPSS and the second one on business plan development. The organization of the course was well perceived in general with an average score of 4.2 over 5.

CONCLUSION

The training course on "Surveys Design, Data Management and Analysis, and Business Plan Development" had positive responses from the participants. The satisfaction survey was returned with high scores within the scale of 1-5 (lowest to highest). Overall most participants found the course interesting and appreciated the interactive learning approach, especially the group activities and the opportunity to converse in their own language. They express also their satisfaction and their understanding on the implementation of the training outcomes on the project.

There were also comments or requests for more long term training courses related to the economic analysis, in general, and impact assessment and value chain in particular. In summary, the training is regarded as a success, however not without issues or revelations. Throughout the course, participants were given opportunities to raise issues that they were concerned with in each thematic area. Some of the main comments or issues raised were:

- Specialized training course for each topic ((i) data analysis and management and (ii) business plan development
- Focusing more on data analysis using SPSS and real data bases
- Need more time for group work and discussion
- Do more practices (field visit/farmers interview) in analysis
- Introducing and sharing a specific software for business plan development
- Long term specific course on monitoring and evaluation of development projects
- Presentations and training material need to be in French
- Sharing data base, useful information and printed materials (books and presentation of the lectures) before the training to use the time allocation for discussion

WAY FORWARD: Action Plan

The last day of the training workshop was reserved for a join meeting between ICARDA and OEP project team. This meeting was focusing on three aspects:

1. Evaluate the training workshop in terms of quality, timing, organization and expected outcomes
2. Develop an action plan with timetable, responsibility and expected deliverables with respect to the baseline study and business plan development
3. Discuss the modalities and the way to provide the 4 feed blocks machines for the identified entrepreneurs

The summary of the different action points issued from this meeting are presented in the following table:

Table 1: Expected deliverables, timetable and responsibilities for each partner

Discussed activity	Action	Responsible	Timeline
Final baseline questionnaire	Modify questionnaire taking into consideration participants and farmers comments	ICARDA (Boubaker Dhehibi)	End of July 2016
Implementation of the survey	120 surveys to be implemented in 6 governorates (20 per governorate), data entered in Excel or SPSS, cleaned and ready for analysis	OEP (Fethi Gouhis, Mohamed Laajili, Raja Ftiti and Monia Ouinti)	End of September 2016
Analysis of the data	Conduct two days training course on the analysis of collected data using SPSS at OEP headquarters	ICARDA (Boubaker Dhehibi and Ali Nefzaoui) OEP (Fethi Gouhis)	First week of October 2016 (after finalization of data collection)
Reporting – Baseline survey	Data analyzed, editing and reporting. Boubaker Dhehibi to provide table of content for the baseline report	OEP (Mohamed Laajili, Raja Fetiti) ICARDA (Boubaker Dhehibi)	November - December 2016
Modalities to distribute the feed block machines	One of the option is	ICARDA (Ali Nefzaoui) OEP (Fethi Gouhis)	After meeting with DG of OEP
Business plan (calculation of the production cost concerning the 20 feed block proven formulas	Udo Rudiger to make the calculation and share the costs for each one of the 20 proved formulas with the ICARDA team and OEP Team.	ICARDA (Udo Rudiger, Boubaker Dhehibi and Ali Nefzaoui) OEP (Fethi Gouhis and Mohamed Laajili)	September 2016 for the calculation of the cost related to the 20 new formulas/feed block October 2016

	OEP team to share the costs with the identified entrepreneurs		
Completed 4 business plan for the identified entrepreneurs	Each entrepreneur should develop a business plan and share it with OEP before receiving the machine. OEP to share with ICARDA for validation	OEP (Fethi Gouhis and Mohamed Laajili) with the collaboration of the 4 identified entrepreneurs ICARDA (Boubaker Dhehibi and Udo Rudeiger)	October – November 2016

Annex I: Training Workshop Program

Training workshop in the frame of the "***Provision of Proven Feed Resources Technologies to Improve the Red Meat Value Chain in Tunisia***" Project

Surveys Design, Data Management and Analysis, and Business Plan Development

Organizer:
International Center for Agricultural Research in the Dry Areas (ICARDA)

Partner country:
Tunisia (OEP, IRESA)

Funder:

Course coordinator at ICARDA:
Dr. Boubaker Dhehibi,
Agricultural Resource Economist
b.dhehibi@cgiar.org

For more information on ICARDA, visit www.icarda.org

Date:　July 18-22, 2016

Location: Tunisia

Agenda

Monday, July 18, 2016	
08:00 - 08:30	**Registration**
08:30 - 09:00	**Opening session**
	Welcome by OEP representative, Mr. Fethi Gohis
	Welcome by ICARDA
	Introduction of participants, lectures and program
	Group photo
09:00 - 09:30	**Tea/coffee break**
09:30 - 10:45	**Lecture 1:** Concepts of farming system research approach
	Boubaker Dhehibi, Agricultural Resource Economist
10:45 - 11:00	Discussion
11:00 - 12:15	**Lecture 2:** Households characterization and livelihoods measurements
	Boubaker Dhehibi, Agricultural Resource Economist
12:15 - 13:00	Discussion
13:00 - 14:00	**Lunch break**
14:00 - 15:00	**Lecture 3:** Farm surveys methods
	Boubaker Dhehibi, Agricultural Resource Economist
15:00 - 16:00	**Lecture 4:** Questionnaire and surveys design
	Boubaker Dhehibi, Agricultural Resource Economist

Tuesday, July 19, 2016	
08:00 - 09:15	**Lecture 5:** Sampling and sample procedures
	Boubaker Dhehibi, Agricultural Resource Economist
09:15 - 09:30	Discussion
09:30 - 10:00	**Tea/coffee break**
10:00 - 11:15	**Lecture 6:** Introduction to statistics analysis using SPSS software
	Boubaker Dhehibi, Agricultural Resource Economist
11:15 - 11:30	Discussion
11:30 - 12:45	**Lecture 7:** Data management and analysis using SPSS software
	Boubaker Dhehibi, Agricultural Resource Economist
12:45 - 13:00	Discussion
13:00 - 14:00	**Lunch break**
14:00 - 16:00	**Practical session** – Data management and data analysis

Wednesday, July 20, 2016

08:00 - 09:00	**Lecture 8:** Theoretical introduction of a business plan
	Udo Rudiger, Agricultural Innovation Specialist and Boubaker Dhehibi, Agricultural Resource Economist
09:00 - 10:00	**Lecture 9:** How to write a business plan for a startup business? Presentation of template
	Udo Rudiger, Agricultural Innovation Specialist and Boubaker Dhehibi, Agricultural Resource Economist
10:00 - 10:30	**Tea/coffee break**
10:30 - 11:00	**Lecture 10:** Presentation of the designed feed block machine components and functioning, and the technical feed blocks formulas
	Ali Nefzaoui, ICARDA Consultant
11:00 - 13:00	**Practical session / Working groups Exercises:** Participants divided into 4 groups with the aim to writing a business plan for a startup business on animal feed block making machine (The 4 groups are to be leaded by the four identified potential entrepreneurs)
	Facilitated by Boubaker Dhehibi, Agricultural Resource Economist and Udo Rudiger, Agricultural Innovation Specialist
13:00 - 14:00	**Lunch break**
14:00 - 15:30	**Practical session (Cont.):** Presentation of business plan by the four potential entrepreneurs
	Facilitated by Boubaker Dhehibi, Agricultural Resource Economist and Udo Rudiger, Agricultural Innovation Specialist
15:30 - 16:00	**Closing, Wrap-up and Way forward (next steps)**
	Mohamed Nasri (DG- OEP Tunisia)
	Ali Nefzaoui (ICARDA Consultant)

Thursday, July 21, 2016

08:00 - 17:00 **Field visit:** Field visit to agricultural farmers to launch the baseline survey in the Governorate of Kairouan (Tunisia), visiting ad assessing the local of the targeted entrepreneur in this region and showing the feed block machines to the participants in this visit

Friday, July 22, 2016

09:00 - 12:00 **ICARDA Office Tunisia: Wrap up and way forward**

- Assessment of the training workshop
- Develop and discuss the plan of work for the survey implementation, data collection and analysis, and the business plan development for the feed blocks machines with the identified entrepreneurs

Annex II: About Trainers

Trainers	Name & Surname	Institution	E-mail
1	Dr. Boubaker Dhehibi	ICARDA – Amman	b.dhehibi@cgiar.org
2	Mr. Udo Rudiger	ICARDA – Tunis	u.rudiger@cgiar.org
3	Dr. Ali Nefzaoui	ICARDA - Tunis	a.nefzaoui@cgiar.org