



## **Evaluation report “Feed resource innovation platforms” in Tunisia**

### **Introduction and Background**

The “red meat value chain project” implemented by ICARDA and its local partners in 2016 and 2017 had installed two regional innovation platforms (PIRACO and PIRANO) to discuss issues related to feed resources in Tunisia. In 2016 the project had first trained NARES staff on the topic of Agricultural Innovations and the importance of Innovation Platforms. Later in 2016, the trained NARES OEP (Livestock Department of MINAGRI) had initiated and facilitated four Innovation Platform meetings in central and western Tunisia, with the support of ICARDA. The meetings were well frequented by different stakeholders. Representatives of farmer organizations, like cooperatives and associations, agricultural extension and research institutes, feed manufacturing enterprises, banks and traders took part. It was an innovation that these different public and private actors met to discuss topics of their concern. These first meetings focused mainly on feed resource technologies like silage, feed blocks and cactus. Surveys were presented on the availability of agro-industrial by-products suitable for feed blocks and feed for small ruminants. Banks presented their conditions for livestock farmers and entrepreneurs to obtain credits. Other topics were availability and multiplication of forage seeds, in particular barley, access to subsidized barley and wheat bran for feed block production as well as the development of a suitable cactus chopper.

### **IP meetings in 2017**

In 2017 two more IP meetings were organized in Kasserine and Kairouan, Central – West of Tunisia. The same stakeholders like in 2016 were invited for the meetings. Around 30 participants took part at each meeting, which was significantly less than in 2016. The participation of woman was very low with 18% (5 / 28) in Kairouan and 19 % (7 / 36) in Kasserine.

During the meetings the major results of the red meat value chain and feed resource project were presented by OEP and ICARDA; in particular the establishment of a functioning seed treatment unit and seed multiplication, the installation of four feed block manufacturing units and enterprises (two entrepreneurs were present), the distribution of 30 new types of cactus choppers and different trainings. A local feed processing machine manufacturing enterprise was present and exposed his different machines to the audience via a short film and slides. In particular a new developed feed chopper, which can chop and grind branches, cactus cladodes, straw and grains created large interest to the farmer group representatives. The machine is sold at 1.500 \$ and has a capacity of 3 – 5 tons a day. The meeting was also used to promote the new drought tolerant barley variety “Kounouz” and announce the availability of 20 tons seeds at OEP station. - Four days later eight tons were sold to farmers - . The lack of access to

subsidized wheat bran and barley for the four feed block manufacturing enterprises was another issue tackled during the meeting. The representative of DGPA (Department of MINAGRI) and a regional governmental representative promised to push this issue in the regional commissions which decides about quota for wheat bran and barley. The final topic was the IP chart. It states the objective, role and regulations of the IP. 24 representatives of different organizations have signed the document at the end of the meetings. Discussions revealed that to make the “innovation platform” sustainable we need a source of income, other than the existing project funding which will stop sooner or later. The need to obtain the capacity in developing projects and looking for funds by IP members themselves was identified.

### **IP activities in 2018**

In order to train IP members in project developing a one-week training workshop was organized from April 2 -5, 2018 in Hammamet. A total of 24 participants ( 9 women and 15 men) took part. The training included the following elements: Problem trees, logical framework of a project, result chain, indicators, action plans and budgeting. The final objective of the training was to enable the participants to develop their own IP project and assure funding.



December 10, 2018, twenty IP members of PIRACO (four women and 16 men) met in Kairouan to visit an innovative feed enterprise called “Tajdid Nutrition Animal”. The enterprise produces hydroponic barley which is chopped and used with other ingredients like straw, wheat bran, soy bean, etc to make silage in bags for the local dairy farmers. In addition he has received the feed block manufacturing unit from ICARDA to start producing feed blocks for small ruminants. During the IP visit, the manager of the enterprise explained the use of the different feed and showed the production of silage and feed blocks with the machines.

The visit of the feed enterprise was followed by an internal meeting of the IP members to evaluate the Innovation Platform approach.

### **Results of the auto-evaluation of the IP approach**

The 20 IP members participating at the auto-evaluation represented the following institutions:

- i) Synagri and URAP, national farmer unions, ii) regional and national OEP, livestock department of MINAGRI, iii) INRAT, the national agricultural research institute, iv) CRDA / CTV, regional agricultural extension service (MINAGRI), v) AVFA, the national agricultural training institute, vi) SMSA El Khir, a farmer cooperative, vii) two individual entrepreneurs interested in feed and forage innovations

On open discussion with the present IP members about major successes and weaknesses as well as challenges for the IP revealed the following points:

## Successes

- New business linkages have been established between the silage producing enterprise “Tajdid Nutrition Animal” and the farmer cooperative “SMSA El Khir”. The cooperative will deliver Luzerne (Alfalfa) hay to the enterprise and takes in return bags of silage.
- Improved knowledge about valorization of agro-industrial by-products for small ruminant animal feed, like production of pellets, feed blocks and mesh.
- New business linkage between farmers and “SFEMI”, a local blacksmith producing choppers for feed production and pellet machines for valorization of local products
- Creation of awareness for farmers about the existence, advantages and availability of the new drought tolerant barley variety “Kounouz”. 20 tons of Kounouz seeds were sold via established linkages between OEP and farmers in 2017 and 2018
- Awareness of the different financial products available for farmers by financial institutions (MFI and banks)
- Mobilization of business idea; the visit to the feed enterprise has triggered a female entrepreneur to consider establishing a feed company using hydroponic barley for silage production
- The national agricultural training institute AVFA is planning to organize visits of their trainees to the Tajdid feed enterprise

## Weaknesses and Challenges

- Weak participation of the private sector; participants of the innovation platform come to 90 % from the public sector and farmer organizations. Representatives of the private sector like banks, MFI and feed enterprises are invited to participate at the IP meetings but hardly show up.
- Lack of ownership; the IP idea was created during the “red meat project” with the intention that the project partner OEP takes the lead and facilitates IP activities and meetings. Unfortunately IP initiative remained always with ICARDA. Although an IP chart was developed by INAT (NARS), an IP member, and presented and signed in 2017 by over 20 participants, objectives haven’t really been achieved.
- Lack of financial sustainability; the IP meetings were all financed by ICARDA project (first “red meat VC project”, then “CRP livestock project”). The idea of strengthening capacity of IP members to elaborate their own IP projects and look for funds to organize meetings and activities didn’t work out. No IP member took the initiative to develop project proposals.
- Gender and age; only 20% to 35% of IP members are female. Average age of participants can be estimated at 45 - 50 years; less likely to promote or adopt innovations.

## Conclusion

The “Feed Resource Innovation Platform” in Central Tunisia has some potentials and successes like the establishment of linkages to develop business and transfer of technologies. But the lack of ownership and implication of private actors like feed enterprises leave the IP to be an informal institution which is very likely to end once project funding will stop.