





Capacity Development: Field day report

Activity title: Promoting cactus (*Opuntia ficus-indica*) as drought resilient feed resource under different agro-ecological production systems across India. Project 3: sub project 2

Action site: Jhansi (India)

Sub activity: Introduction of Cactus (Opuntia ficus-indica) as a multi-purpose

Source of funding: ICAR – W3/Bilateral

Activity leader: Mounir Louhaichi

Key national partner: Indian Grassland & Fodder Research Institute (IGFRI)

Objective: Increase cactus awareness, dissemination and adoption for improved drought resilience, and to enhance capacity building of all partners.

Target audience: Smallholder farmers, livestock keepers and extension agents

Activity mapped to CRP: CGIAR Research Program on Livestock

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

Flagship: Feed and Forage









Field day agenda

Date: 21 November 2017

Location: Village Dhobia, Datia (MP), Jhansi India

10:30 AM to 11:00 AM Welcome and Introduction

Dr. Sunil IGFRI Mr. Dasarath

11:00 AM to 11:30 AM Field visit — Cactus plantation and use demonstration

Cactus plantation

Cactus use for feed

11:30 AM to 12:30 PM **Discussion**

Discussion about the importance of cactus, practices in cactus plantations, cactus use as a feed crop, cactus as a tool to generate income. Discussion with Farmers,

ICARDA, and IGFRI staff

Dr. Sarker Dr. Sawsan Dr. Sunil Dr. Shahed Dr. Meshra

12:30 PM to 01:00 AM Lunch

01:00 PM to 1:15PM Wrap Up







Minutes

The farmer's day at Jhansi District, India was organized on Friday, 21 November, 2017 (Figs. 1 and 2). Attending the farmers' day were Drs. Sunil Kumar, A. K. Misra, Shahid Ahmed, Palsaniya and Vikas Kumar representatives of ICAR (Indian Grassland & Fodder Research Institute, Jhansi), Drs. Ashutosh Sarker and Sawsan Hassan (ICARDA representatives), and 69 farmers. Of the farmers present, more than 50% were female farmers (Appendix 1).

Dr. Sunil Kumar, Head, Crop Production Division (ICAR - Indian Grassland & Fodder Research Institute "IGFRI", Jhansi) highlighted the importance of cactus as green fodder for animal feed and as an ideal alternative to control water erosion. He gave a detailed outline of the activities being carried out by ICARDA and encouraged farmers to actively take part in the planting of spineless cactus on their land. The research conducted in IGFRI has proven the suitability of cactus as a crop and animal feed in the Jhansi region. Dr. Sunil highlighted the role of ICARDA in increasing efforts to promote spineless cactus, as well as encouraging farmers to grow spineless cactus for feeding animals during the dry periods. He mentioned that cactus dissemination started four years ago and since then, the number of farmers growing cactus has steadily increased. This reflects the great potential of cactus as both a crop and livestock feed resource in Jhansi.





Fig 1: Scientists of ICARDA and IGFRI sharing their experience of cactus in India.

After this Mr. Dasarath, the pilot farmer who initiated the cactus plantation three years ago, welcomed the participants. He highlighted the importance of research institutes like IGFRI and ICARDA in providing new technologies which enhance the farmer's income. He then gave participants on the farmers' day a tour of his cactus plantation, so that they could witness the growth and adaptability of cactus at first hand.











Fig 2: Participation of women and men in the field day for cactus in Dhobia, Datia, India

Mr. Dasarath explained the benefits of cactus as a green fodder, and also highlighted how it has shown growth adaptability to the conditions in Datia, India. Mr. Dasarath highlighted the fact that cactus is very easy plant to establish and that it grows well with very little inputs. As a result, he indicated that he decided to expand his plantation area and participants were also given a tour of the newly expanded section. Mr. Dasarath demonstrated how to use cactus as green fodder, and mentioned that he had personally witnessed its positive impact on the growth and survival of animals (Fig. 3). Mr. Dasarath stated that he is very much happy with cactus as he is now able to generate more income though selling the cactus cladodes to new farmers.

Afterwards, all participants were invited to have a general discussion. Drs. Ashutosh Sarker and Sawsan Hassan welcomed all participants and explained ICARDA's mission to target poor farmers in the dry areas in order to improve their livelihoods. They highlighted the importance of cactus as a multipurpose crop for the dry areas. They also mentioned that the adoption of cactus is now worldwide as it has been proven that cactus has the potential to mitigate climate change, to reduce the green fodder gap and to also enhance farmers' income. Drs. Sarker and Hassan also stated that ICARDA's objective to give full support to farmers, who should also maximize ICARDA's and IGFRI's research initiatives aimed at improving their food security and livelihoods. Dr. Sunil acknowledged the role of these international organizations in introducing new technologies which benefit the livelihoods of communal farmers, such cactus. The farmers showed interest in planting cactus, and they thanked ICARDA and IGFRI for their efforts to introduce new technologies that will help them enhance their livelihoods.











Fig 3: Demonstration of cactus as an animal feed in Dhobia, Datia, India.



Fig 4: Mr. Dasarath highlighting the importance of cactus.

Authors

Dr. Mounir Louhaichi. Senior Rangeland Scientist at the International Center of Agricultural Research in the Dry Areas in Amman, Jordan. M.Louhaichi@cgiar.org

Dr. Sawsan Hassan. Research Associate at the International Center of Agricultural Research in the Dry Areas in Amman, Jordan. <u>S.Hassan@cgiar.org</u>

Dr. Ashutosh Sarker. Regional Coordinator & Food Legume Breeder, South Asia & China Regional Program, New Delhi, India. <u>A.Sarker@cgiar.org</u>