

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: Bhuj, Gujarat (India)

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

Source of funding: ICAR – W3/Bilateral

Activity leader: Dr.Mounir Louhaichi

CAZRI focal Point: Dr. Devi Dayal

Key national partner: Central Arid Zone Research Institute (CAZRI), Regional Research Station Kukma, Bhuj, Gujarat

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 : 31 October 2018

Location : Village Lakhond, Bhuj,India

04:00PM to04:30PM

Welcome and Introduction

Mr. Sachin Patel
Mr. Hargovind Kunpara

04:30 PM to05.00 PM

Field visit—Cactus plantation and use demonstration

Display Cactus plantation and its use via video clips
Cactus use for feed

05.00 PM to05.45 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, CAZRI staff
Dr. Devi Dayal
Dr. Ramnivas
Dr. Arvind Tatarval
Mr. Hargovind Kulpara

05.45 PM to6.30 PM

Lunch

06.30 PMto06.45 PM

WrapUp

Minutes

Thorne-less Cactus as an alternate fodder resource for drought prone Kachchh

Kachchh is witnessing acute fodder deficit due to prevailing drought situation this year. Under these conditions, Thorne less cactus has the high potential to become an alternate fodder crop in arid Kachchh. To disseminate its importance as a fodder crop, CAZRI organised Cactus Field Day on 31.10.2018 at Toral Dairy, near village- Lakhond, Taluqa- Bhuj, where about 153 farmers including 55 women and 98 males, who are interested to grow Cactus on their farm as fodder crop, participated in the meeting. Shri Gangaram Bhai Jabuani, Chairman, Toral Dairy was the Chief Guest of the function and Sh. Ramesh Bhai Chhabhaiya, Samaj Pramukh was the Guest of Honour. Mr.Sachin Patel, Project Associate, CAZRI welcomed the Chief Guest and the farmers. Dr. Ramniwas, KVK, CAZRI elaborated the importance of Cactus as fodder crop for Kachchh region. He also told that this Cactus is a multipurpose plant, besides fodder crop, it has many uses as fruit crop, vegetable crop and as medicinal crop. It is a drought tolerant plant and has a better Water Use Efficiency than any other conventional drought tolerant fodder crops, i.e. to produce 1 kg dry matter; it needs 267 kg of water against 400 kg required for pearl millet and 1000 kg water required for Lucerne. This Cactus is very easy to establish in arid conditions and highly palatable and digestible for animals..Dr Devi Dayal, Head, CAZRI talked about cactus cultivation in Kachchh region. This cactus can be planted on even highly degraded soil with very less amount of water. Cactus can be harvested as fodder very easily by breaking its cladode from stem. After chopping the cladode, it should be mixed with some dry fodder like wheat, pearl millet or sorghum straw in 1:3 for feeding. About 10-15 kg chopped thorn-less cactus may be fed to one cow/buffalo per day. It can be also be fed to sheep, goat and camel. This fodder has very high amount of carbohydrate, mineral and water, but is deficient in protein. Therefore, protein supplement is required with cactus feeding. As the growth of cactus is very high during February to June, its green fodder is available when there is acute shortage of the green fodder during summer season. A total of 64 accessions of the cactus are being maintained and evaluated at CAZRI. Out of these, based on growth and yield of green fodder in dry climate of Kachchh, 5 accessions are given to farmers for demonstration for fodder cultivation. A film showing cactus cultivation, its harvesting/chopping and how to feed animal was shown to the farmers. This show generated a lot of interest and discussion by the farmers. Dr Arvind Singh Tatarwal, KVK, CAZRI also discussed about plant protection measures in cactus cultivation. As such no any damage by insects or disease are reported in field condition of Kachchh. A question-answer session was also arranged. Many farmers shared their experiences on cactus cultivation and raised their queries about its feeding schedule to animal. Sh. Ramesh Bhai Patel, a progressive Farmer, told that this Cactus may become very use full plant for Kachchh, especially under present drought situation, as it requires very less amount of water and gives high fodder production besides, can be grown for fruit, vegetable and medicinal purpose. Mr Hargovind Kunpara, CAZRI answered their queries on cactus cultivation. Shri Vipin Raj, Bharat Virpuria, and Sh. Ramesh Bhai Dadga, Bhailal Bhai Chhabhaiya assisted in arranging the programme.





Authors

Add the names of the resources persons who participate in the event with the affiliation

DrDevi Dayal(Head, CAZRI RRS Bhuj)

DrRamnivas(SMS, KVK – CAZRI Bhuj)

DrArvind Tatarval (SMS, KVK – CAZRI Bhuj)

Mr.Vipin Raj (T3, KVK – CAZRI Bhuj)

Mr.Bharat virpuriya (T1, KVK – CAZRI Bhuj)

Mr Sachin Patel (Project associate, ICARDA- Cactus, CAZRI RRS Bhuj)

Mr. Hargovind Kulpara (T-5,CAZRI RRS Bhuj)

Personal information including Name, Business Title, Email, Phones, Images and GPS points included in this report have been authorized in writing or verbally by the data subject.

Appendix 1: List of Participants in the field day