

ONE WEEK REFRESHER TRAINING FOR IFS OFFICERS
On
Integrated approach for sustainable development of fragile desert ecosystem
15-19, December, 2014

A one week refresher course for IFS officers was conducted at Arid Forest Research Institute, Jodhpur from 15th-19th December 2014. Twenty two (22) IFS officers from different states attended the course. The refresher course was entitled "**Integrated approach for sustainable development of fragile desert ecosystem**". Shri Abhijit Ghosh, Retd. PCCF, Rajasthan was the Chief Guest of the inaugural function. The course was designed in such a manner that both class room lectures/interactions and the relevant field visits were equally emphasized.

Class room lectures were also delivered covering different aspects that included desert ecosystems, types of desert, extent & spread of deserts as well as the dry areas and its characteristics, problems due to desertification; floral diversity of Thar Desert, combating desertification and the related programmes; nanotechnology and its probable uses in forestry and forest genetics and its limitation and faunal diversity in the desert; watershed management and water availability in arid zone of Rajasthan; rehabilitation of arid saltlands supported by the case studies; plants of medicinal values in dryland areas and their application and agroforestry with emphasis on improving land productivity and climate change mitigation.



Inaugural function in Conference hall of AFRI (left) and a lecture by Dr. J.C. Tarafdar, Principal Scientist, CAZRI, in Seminar Hall, AFRI (right)

A field tour of Jaisalmer was organized on the second & third day of the course. The participants were taken to Setrawa in Jodhpur district and were demonstrated the sand dune stabilization work by SFD, Rajasthan. Here intensive plantation of *A. tortilis* and

utilization of other exotic and native species in stabilization of the shifting sand dunes has been carried out. These dunes were once causing road blockings and habitation shifting. The participants were also shown the reactivation in sand drift due to lack of surface vegetation cover as the *A. tortilis* trees have grown tall leaving surface soil uncovered. Some gap formation was also there because of mortality/uprooting of *A. tortilis* tree. On the way, the participants were exposed about the pasture work of *Lasiurus indicus* carried out by Jaisalmer Centre of CAZRI, as well as pasture development and afforestation work carried out by State Forest Department under Rashtriya Krishi Vikash Yajana and the benefits accrued from these pasture development works.

More than 100 hectares 'Khajoor' plantation (now under production) carried out along Jodhpur-Jaisalmer Road in Chandan (Jaisalmer) area was also shown to the participants.



Visit of sand dune stabilization work at Setrawa and pasture development work in Jaisalmer.

While passing through Desert National Park participants were shown the belt of *Haloxylon salicornicum* and the pasture areas developed under protection for Great Indian Bustard (GIB) in Khuri and Sudasari areas. At Sudasari participant were introduced by CCF (Wildlife), Sh. G.S. Bhardwaj and his DNP team. A group of five Great Indian Bustard were also seen by the participant in Sudasari enclosure. Then participants were taken to the shifting dune at Sam, to see and visualize the hardship of man and animals life in Thar and Ecology of the desert.

The team also visited Akal Fossils Park (DNP) 20 km from Jaisalmer on Jaisalmer-Barmer Road, where 180 million year old fossilized trees of Gymnosperms have been preserved. It reveals that this part of Thar was highly mountainous tract where Gymnosperms forests/trees either existed or transported from elsewhere under torrential rain/flood 180 million years ago. Some fossils of marine animals kept there were also observed. The participants also visited Tail end (1458 RD) of Indira Gandhi Nahar (IGNP) at Mohangarh,

and were shown the afforestations/strip plantations along canal primarily to protect the Canal from being silted by the shifting sand dunes and windblown sands. While returning from Nachana to Pokharan, the participants were exposed about different habitats occupied by *Calligonum polygonoides* a species of sand dune and *Haloxylon salicornicum* a species of mild saline depressions. On the way, the participants were also exposed to the community forestry, i.e. Oran dominated by *P. cineraria* tree and *Ziziphus rotundifolia*.



Visit of Akal Fossil Park (left) and canal plantation at tail end of IGNP at Mohangarh (right)

REFRESHER COURSE FOR IFS OFFICERS (15th-19th December 2014)



Sitting (Left to Right): 1. Sh. P. S. S. Sastry 2. Sh. N. C. M. Reddy 3. Sh. R. S. C. Jayaraj 4. Sh. S.K. Gupta 5. Dr. G. Singh 6. Dr. R. K Srivastava 7. Sh. N. K. Vasu 8. Sh. Monish Mullick 9. Dr. Smt. Ranjana Gupta 10. Dr. Mohan Jha 11. Sh. Sunil Agarwal 12. Sh. Aseem Shrivastava 13. Dr. G. S. Bhardwaj 14. Sh. B. R. Bhadu

Standing (Left to Right): 1. Sh. K. J. Singh 2. Sh. Brijesh Kumar 3. Sh. Anil Vaidya 4. Sh. Chaitanya Narain 5. Dr. Rajendra Singh 6. Sh. N. K. Guleria 7. Dr. G. Sudhakar 8. Sh. Sanjay Srivastava 9. Sh. Ashok Dikshit 10. Sh. Mohan Meena 11. Sh. N. S. Murali 12. Sh. Om Prakash