

## Minutes of District Level Workshop & Experience Sharing Meet on Climate Change Impact and Possible Adaptive Strategies

Venue: Hall of Minority Development Cell, Bankura

Date: 27.05.2016

Development Research Communication and Services Centre (DRCS) is implementing a project which focuses on developing climate adaptive and resilient livelihood systems through diversification, technology adoption and natural resource management for rural small and marginal farmers associated with agriculture and allied sector specifically in semi-arid region of Purulia & Bankura Districts of West Bengal, India. The project is initiated last year with a launching programme in **28<sup>th</sup> May 2015** and after that various activities are going on focusing on to mitigate and deluge the adverse impact of Climate Change on food & livelihood security of the small & marginal farmers.



With this backdrop, a one day **District Level Workshop & Experience Sharing Meet on Climate Change Impact and Possible Adaptive Strategies** has been organized in **Conference Hall of Minority Development Cell, Bankura on 27<sup>th</sup> May 2016**. The objective of this programme is to share the activities which are done by DRCS for the last one year and recommendations & suggestions for further development of the project. The programme initiates with welcoming of guests in the dias. The guests are;



**Smt. Aditi Dasgupta, ADM (Dev.) of Bankura District, Sri Nimai Ch. Halder, PD, DRDC, Bankura, Sri Somnath Bhattacharya, DDM, NABARD, Bankura and Prof. (Dr.) Sugata Hazra, of Oceanographic Studies, Jadavpur University, Kolkata.** After that the inaugural ceremony is

done by lighting the lamp with grace presence of **Smt. Aditi Dasgupta, ADM (Dev.) of Bankura District.**

**Smt. Somjita Chakraborty, Chief Executive Officer (CEO) of DRCS** welcomes the guests and shared the objective of this District level workshop. She also stated in brief the interventions according to the project objectives and requested all Govt. officials and Steering Committee members to make comments on it.



An **Audio-visual reportage** on the interventions of last one year of activities in Bankura & Purulia is shared in front of the audience. The reportage highlights the crop advisory services and its process of circulation to the beneficiaries, rain water harvesting structures, mixed cropping, nutrition garden, Integrated Farming System (IFS), ditch excavation, Dug-well excavation, plantation like, Mango orchard with mixed cropping etc. different types of adaptive measures which was implemented in the villages of Bankura & Purulia to reduce climatic variability.



Following this **Dr. Sugata Hazra, Professor in School of Oceanographic Studies, Jadavpur University** presented on Gram Panchayat level micro-planning based on GIS mapping and community perception. Jadavpur University (JU) is conducting this study to find out the possible adaptive measures to cope up with climatic changes. He highlighted the average rainfall with Standard Precipitation Index (SPI), forecast of draught and contour map of both the districts. He shared some of the findings of the study including study of soil mixture, village level topography and water resource assessment etc.

According to the study findings interventions of DRCSC are more beneficial in the Semi-Arid regions of West Bengal. Moreover the study focuses on ecosystem based cropping pattern, alternative practices to increase water availability, depth of pond, size of pond, renovation of existing water storage system, trend analysis of water demand (domestic consumption, irrigation and other livelihood purpose etc.). The study will be continued and a micro-plan with a holistic approach of development will be developed shortly.

After that the interventions with respect to expected outcomes are shared by **Sri Sujit Kumar Mitra, Project Manager of DRCSC and Convener of District level Steering Committee**. He focused on weather prediction data and its process of circulation among the farmers. The weather data is received in Climate Resource Centre (CRC) and then the data is sent to Climate Expert. After that the prediction from experts sent to group of experts in Agriculture Universities. The advices from agricultural expert are again sent to CRC and it is translated to local



**Case Story – Reduction of cost through weather prediction**

Hetiasura Bindas Group

Address: Hetiasura,

6 members jointly did relay cropping (Grass pea in 5 bigha paddy field).

- Following weather prediction of possibility of rain on 14<sup>th</sup> and 15<sup>th</sup> March, they harvested Grass pea on 13<sup>th</sup> March, 2016 and indeed it rains on that day.
- Following weather forecast they could save crop loss and harvested grass pea jointly.

language. The information is then widely disseminated and it empowers the farmers to make own decision for farming activities. Sri Mitra pointed out that although there is draught situation in current year in the project areas, but the farmers are cultivating crops according to the weather prediction and advisory messages. He enlightened on a case story where reduction of cost and reintroduction of *Horsegram* crop is done through weather prediction. Some of the experiences of the farmers like Mahadev Tudu of Bankura practiced alternative agriculture (vegetable

cultivation) in Baidh land (medium up land). Sudhir Kumar Besra gets help from *Krishi Paramarsha* (Crop Advisory messages) and rescued his crop from pest attack. Likewise experiences from Joydeb Mandi, Ramkrishna Murmu etc. shared that the crop advisory messages helped a lot for continuing farming in climatic uncertainty. During the sharing **Fishery Extension Officer (FEO) of Sonamukhi Block** requested for having these weather prediction data for their region.

**Single stick paddy cultivation**

**Name :** Sitaram Hansda

**Village:** Namogora Jaganatdihi

**Size of plot:** 5 Katha

**Seed required:** 300 gram

**Tiller:** 26

**Paddy harvested:** 142 kg (this year)

**Paddy harvested in traditional practices:**

116 kg (Last year in the same plot in traditional practices)



Further experience was shared from many resource farmers. **Padmabati Mandi of Chingri village, Bankura** is an integrated farmer. She developed herself as community level resource person and motivates other farmers to practice ecological and integrated farming. She got help from crop advisory services. She has his own vermi-compost unit, livestock rearing, *Azolla* cultivation, Bio-gas etc.

**Srimanta Soren from Joynagar village, Bankura** is a small farmer and involved in mixed cropping, fallow land cultivation, Bio-gas, vermi-compost etc. He shared that, in his fallow land he practiced uncultivated tuber crops (*Baola, Madhu, Churka Alu* etc.) which is a strategic crop and a good source of carbohydrate and other minerals.



**Kshepu Hembram of Gopalpur, Bankura** is also an integrated farmer practicing mixed cropping, tuber crops (strategic crops) etc. He became a trainer in his local area and aware the farmers on the adaptive strategies to climate change for continuing farming.

**Urmila Tudu of Kendua, Bankura** has nutrition garden and introduce different irrigation techniques to cope up with water scarcity situation in this dry region. She motivated to use pitcher irrigation, bottle irrigation, reuse of waste water etc. In a land of 500 sq. ft. she cultivates vegetables round the year. She is an example of managing water systems in dry region.



#### Appreciation and suggestions from Govt. officials:



**Sri Asish Kumar Bera, Deputy Director of Agriculture, Administration, (DDA, Admin) of Bankura** commented that erratic rainfall is experienced in Bankura. He felt the urgency of collaborating different Govt. schemes & programmes like ATMA, BGREI etc. with this project. He also shared about Customer Hiring Centre (CHC) a unit where farmers get machines in subsidized rate for farming practices. He suggested for making linkage with Paramparagat Krishi Vikas Yojana (PKVY) where a cluster-wise approach is taken for distribution of

indigenous as well as high yielding paddy seeds, inputs etc. Farmers from different villages of Bankura interacted with Sri Bera for getting proper services from the department.

**Dr. Mou Sen, General Manager, District Industry Centre (DIC), Bankura,** appreciated the activities of DRCS and give stress on developing cooperatives for marketing of agricultural produces.



**Sri Somnath Bhattacharya, DDM, NABARD, Bankura,** congratulates DRCS for sharing their activities for the last year and encouraged to go on in the coming years. He focuses on fund mobilization from different agencies for doing these kinds of climate resilient models and introduces adaptive strategies for the small & marginal holding families.



Likewise **Sri Mrinal Kanti Mondal, ADA, S & P, Bankura** and **Sri Abhijit Kumar Saha, Assistant Director of Fisheries,** encourage all the staff of DRCS to carry forward the initiatives for climate change adaptation. They assure all kind of support regarding implementation of activities.



**Dr. Malay Kumar Majhi, Deputy Director of Horticulture (DDH), Bankura** appreciated the initiatives of DRCS and assures every kind of assistance regarding project implementation in the District.

**Smt. Aditi Dasgupta, ADM (Dev.), Bankura,** congratulates DRCS for organizing this workshop and feels glad to participate in it. She appreciated the development approach of DRCS which is appropriate in this semi-arid regions coping up with water scarcity problems and encouraged to more in the coming years. She gave best wishes for all the project staff to carry forward the interventions more successfully in the coming 3 years of project period. She shared her experience of heat-wave for the last 2 months in the District Bankura and appeal for giving stress on the water harvesting and conservation besides other programmes for coping up with this situation. She also invites all the line departments for making linkage and coordinates for implementing adaptive measures for possible climatic changes. She



said that DRCS can be involved in Chhatna Block for scientific expertise. According to her, in the coming year the Development Plan for Bankura will be developed based on the context of Climate Change and the experiences that are shared by DRCS.

Moreover, in this sharing workshop Exhibition of stalls, Demonstration of Climate Change Adaptive Models for sustainable living, Organic food Product etc. is present.



**Sri Dipak Ghosh, Bankura District In-charge of DRCS** conveys Vote of Thanks to all the dignitaries and participants and concluded the programme.

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