Department of Agricultural Meteorology, CCS HAU Hisar

RKVY project: Establishment of Agro-Geoinformatics lab for research and application purposes

Success Story under RKVY

1. **Title:** Agro-Geoinformatics Laboratoryestablished
2. **Category:** Agriculture and all other spatial sciences. The lab is first of its own kind in the university to cater needs of spatial analysis (i.e. Remote Sensing and Geographical Information System applications) in agriculture and allied sciences with the help of latest techniques of space born data and its interpretations using high end software. It would be a central lab for university where scholars of all discipline can carry out their research which will further improve the practice of interdisciplinaryresearch.
3. **Challenge:** In changing scenario of technical aspects in research, more emphasis is going towards digital and spatial analysis. Globally, most of the universities/research centers have their own setup for Geoinformatics studies; and leading in spatial researches in agriculture. In India too, many universities have established this facility in their domain. HAU also keenly desired to have such facility so that this technique can be utilized in different researches going on in the university.
4. **Initiative:** The items / instruments necessary in the lab were not only costly but their availability was also not possible at local level. Being different kind of data used in the lab i.e. digital imageries acquired by satellites and other digital data needed in GIS, special kind of software and hardware were required. To meet out this, Two University Lab Kit (2 licenses) of GIS software (ESRI ArcGIS), One University Mini Lab Kit (5 licenses) for digital image processing software (ENVI), one Global Positioning System device, Aerial photographs and eight workstations along with peripherals like printers, scanners were purchased. As soon the lab started, we call for application from university researchers/scientists for training and got positive response. Ten faculty members registered themselves for learning this new field of Geoinformaitcs. The training was conducted from 13th to 19th September 2016 covering different aspects of Geographical Information System and its applications in agricultural research. For better understanding and developing skills among trainee, the training was more focused on practical aspects i.e. hands on software. The

trainees were trained to import different format of data, their interpretation, classification, making and editing data in GIS, mapping etc. by assigning exercises.

5. **Key result/insight/interesting fact:**University has now successfully established the Agro-Geoinformatics Laboratory which can be used by all faculty members of the university. This facility will also provide a new dimension of spatial analysis to research which was not possible in university premises earlier.
6. **Impact:**Under Graduate, Post Graduate and Diploma students of the university utilized the Lab facility for their practical exercises and research. Faculty members also carried out their research using RS GIS software. Participants (from different states) in training programmes in this department also utilized the geo-informatics lab facilities.
7. **Lesson Learned:**
    1. What did you learn in this process? What was difficult of challenging?
       Availability of resources of lab attracted the concerned scientist to use it in their field. Recently, Deptt. of Soil Science carried out soil sample interpretation for five research stations/KVKs.
    2. How did you overcome the challenges faced? NA
    3. If you were to do all over again, what would you do differently? NA

8. **Supporting Quotes and Images:**

During the above said training, feedback provided by trainees is as under:

- *Training was extremely good for its applicability in the near future for strategic management of agriculture.*

  …Dr. Bharat Singh Ghanghas, Asstt. Scientist (Extn. Edu)
- *The training was really good for us& it will be helpful for agricultural research.*

  …Dr. Narender Singh, Asstt. Plant Pathologist (GPB)
- *GIS with Remote Sensing helps a lot in understanding agriculture in different aspect. Training helps us in a systematic way to understand its appellations in agriculture and allied fields.*

  …Anuradha, SRF (GPB)
- *Very useful training and should be updated through such trainings time to time.*

  …Dr. C.S. Dagar, Asstt. Scientist, RRS Kaul

Photographs of Training:

Photographs during training Course: Understanding Geographical Information System (GIS) and its applications in Agricultural research' (September 13-19, 2016)

9. Additional Informaiton:

1. List of all project partners and/or donors who supported the work. NA
2. Links to supporting material, such as news items, photos on Flicker and presentations of slide share. NA
3. Contact person for this story

   PI of Project: Dr. Anurag, Asstt. Scientist, Deptt. of Agricultural Meteorology, CCS HAU Hisar, email: anurag.airon@gmail.com

   Co-PI of Project: Dr. Raj Singh, Prof. & Head, Deptt. of Agricultural Meteorology, CCS HAU Hisar, email: headagmet@gmail.com
4. Other information you want to add: Nil

10. Checklist

No.	Question to consider	Yes	No
1	Is the story interesting to the target audience of the project/activity report?		
2	Does the story explain what new insights the project brings? What is the main lesson learned from this story? Does the story describe a key insight on what works and what doesn't and something that future project could build on		
3	Does the story describe the outcomes the project produced and the people who are benefitting? What changes–in skills, knowledge, attitude, practice, or policy–has the project brought, and who is benefitting from these changes?		
4	Does the story make a compelling point that people will remember? Does the story show how the project makes a difference to improving livelihoods and lessening poverty?		
5	Does the story provide an interesting fact that people will remember? For example, how much yields increased, how many hectares of land could become more productive from this innovation or technology?		
6	Does the story explain what kind of impact this innovation or technology could have if scaled up?		
7	Does the story show which partners contributed and how?		
8	Does the story include quotes from Stackeholders or beneficiaries?		
9	Have I provided links to other media (journal articles, website news, newsletter, blogs, annual reports of other Programme/ project) that also feature this story?		
10	Have I provided the contact details of people who can provide more information?		

Prof. & Head

From

Prof. & Head,
Deptt. of Agril. Meteorology,
CCS HAU Hisar

To

The Director of Research
CCS HAU Hisar

Memo No…….. Dated:

Subject: Guidelines and Template for success story under RKVY.

With ref. to your office memo no. DR/BI/2017/RKVY/2017-18/6551-77 dt. 10.07.2017, please find the enclosed report on success story under RKVY.

This is for your kind information and necessary actions please.

Prof. & Head