# Proceedings of Interaction meeting on Digital Soil Mapping between David G. Rossiter, ISRIC - World Soil Information, Wageningen (NL); Phillipe Lagacherie (INRA) and Cecile Gomez (IRD), France

Location: ICAR-NBSS&LUP, Bangalore

Date: 08-12-2022 to 09-12-2022

#### Presentations and discussion

**David Rossiter** explained the background, structure and progress of the Soil Intelligence System for India, in particular its activities in DSM.

**Philippe Lagacherie** proposed "local" DSM approaches, and therefore novel ways to collect and use soil data as inputs to such models.

**Cécile Gomez** presented approaches to Vis-NIR lab spectroscopy and remote sensing for soil characterisation and mapping.

**S. Dharumarajan** presented a results of "IndianSoilGrids" project. Several case studies were presented from Karnataka, Andhra Pradesh, Kerala, Rajastan and Maharasthra. Applications included spatializing a crop model (STICS), defining fertility management units, and mapping C sequestration potential. Challenges and future directions were presented.

**Discussion**: In the afternoon a vigorous discussion ensued. A main focus was on the uses of DSM products. What scales are appropriate? Is it possible to reach farm scale or are the products more useful for project targeting? What are the specific areas and possible institutional arrangements for collaboration and data/product sharing?

**Dr. B. P. Bhaskar**, Director, NBSS&LUP gave final remarks and encouraged cooperation among the parties.

**Collaboration:** Possibilities NBSS&LUP collaboration in **CSISA**: The "Soil Intelligence System for India" project was discussed

**Field visit:** On 9.12.2022, International team visited Bagapalli Taluk and interacted with Reward Field staffs on soil profile study and mapping of land resources.









## **List of CIMMYT participants:**

- 1. David G. Rossiter, consultant
- 2. Dr. Poonia, CSISA Bihar
- 3. Dr. Bhavani Pinjara, GIS/remote sensing specialist
- 4. Dr. Harshit Rajan, GIS/remote sensing specialist

### **List of French Team**

- 1. Phillipe Lagacherie (INRA)
- 2. Cecile Gomez (IRD),

#### List of NBSS&LUP, Bangalore participants

- 1. Dr. Rajendra Hedge, Principal Scientist and Head
- 2. Dr. V. Ramamurthy, Principal Scientist
- 3. Dr. S. Srinivas, Principal Scientist
- 3. Dr. S. Dharumarajan, Senior Scientist
- 4. Dr. Sunil Maske, Senior Scientist
- 4. Dr. R. Vasundhara, Senior Scientist
- 5. Dr. R. Srinivasan, Senior Scientist
- 6. Dr. B. Kalaiselvi, Scientist
- 7. Dr. KS. Karthika, Scientist
- 8. Dr. K.V. Niranjana, CTO
- 9. Dr. Arthi, CTO
- 10. Dr. Venkatesh, ACTO

#### **List of Online participants**

- 1. Dr. B.P. Bhaskar, Director
- 2. Dr. N. G. Patil
- 3. Dr. M.S.S. Nagaraju
- 4. Dr. P.T. Tiwary
- 5. Dr. Uday Saikia
- 6. Dr. Jaya N. Surya
- 7. B.N. Ghosh
- 8. Dr. G.P. Obi Reddy
- 9. Dr. Tapati Banerjee
- 10. Dr. K. Karthikeyan
- 11. Dr. D. Vasu
- 12. Dr. Nirmal Kumar
- 13. Dr. P.C. Moharona
- 14. Dr. H. Biswas
- 15. Dr. Sunil BH
- 16. Tarit Chattopadhyay
- 17. Other scientists from HQrs and RC