

## Press release

Zurich/ Delhi/ Ropar, 9 March 2020

# IIT ROPAR signs tripartite Memorandum of Understanding (MoU) with KBK Environ Infrastructures Ltd. and CelsiusPro

---

- The consortium will provide crop yield modelling throughout the globe.
- IIT Ropar will provide all remote sensing-based data inputs, parameters and will develop machine learning models using Artificial Intelligence and Deep Learning for crop yield prediction and estimation in India.
- IIT Ropar will provide field data about the soil health parameters, soil type, land parcel boundary and would develop a mobile app for use by farmers to store and send crop and soil-related on-ground data.
- CelsiusPro will set up a front-to-back platform from pricing, policy management and settlement to climate and NatCat monitoring for enabling seamless settlement of Claims Under various Fasal Bima Yojna.
- IIT will Set-Up and do the operation of Crop Yield Estimation System on village/block level in India which will be used by CelsiusPro as Input for the platform for the monitoring, estimation and calculation of loss based on average yield forecast at farmland parcel-level.

**Ropar: 9<sup>th</sup> March 2020:** IIT Ropar has made a historic collaboration with KBK Environ Infrastructure Ltd and CelsiusPro today in a meeting held at IIT Ropar. The meeting witnessed signing up of MOUs with two IIT Departments- Department of Civil Engineering and Department of Chemical Engineering. KBK Environ Infrastructure Ltd was represented by Shri Jagjit Singh Kochar and Shri Devendra Kumar Kaushik. CelsiusPro AG was represented by their Director of Business Development & Technology Sebastian Glink who joined via Skype.

The consortium formed by the collaboration of IIT, KBK and CelsiusPro will work to provide crop yield modelling throughout the globe. Dr. Tiwari and his team would provide all remote sensing-based data inputs, parameters and would develop machine learning models using Artificial Intelligence and Deep Learning for crop yield prediction and estimation in close association with the Department of Computer Science and Engineering, IIT Ropar. Dr. Tiwari and his team would also provide field data about the soil health parameters, soil type, land parcel boundary and would develop a mobile app for use by farmers to store and send crop and soil-related on-ground data. KBK would co-ordinate in the collection of historical field data from farmers regarding crop yield.

IIT will set-up and do the operation of Crop Yield Estimation System on village/block level which will be used by CelsiusPro as Input for a web based platform for the monitoring, estimation and calculation of loss based on average yield forecast at farmland parcel-level. This consortium will focus on providing digital solutions for GOI schemes like Pradhan Mantri Fasal Bima Yojana for the states where this scheme has been implemented. For states which are planning to adopt their own Fasal Bima Yojana, like Punjab, the consortium will work to provide customised solutions.

The consortium will provide comprehensive technology solutions for the project provided to the Government, Semi-Government, Private Sector or any other entity operating in India and globally. The consortium will develop customised front-to-back solutions from pricing, policy management and settlement to climate and NatCat monitoring tools for enabling seamless settlement of Claims Under various Fasal BimaYojna. The consortium shall intend to use the yield prediction models for benefitting the farming community and would help and ease the crop insurance process for entire Punjab state.

Dr. Naveen James, HoD Civil Engineering Department said, "Study of the Environment, Agriculture and Water are few of the key focus theme of the department, and this MoU will add new dimensions to it."

Sebastian Glink, Director Business Development & Technology from CelsiusPro adds "CelsiusPro is very excited about the fantastic collaboration with two excellent local partners. IIT Ropar is a well-recognized research institute and together with the expertise of KBK Group and our experience in index-based insurance solutions we will develop innovative insurtech solutions mainly for the Indian agriculture market."



Dr. Reet Kamal Tiwari (IIT Ropar), Shri Jagjit Singh Kochar (KBK), Shri Devendra Kaushik (KBK), Sebastian Glink (CelsiusPro) sign the MoU.



Left to Right- Akshar Tripathi, Dr. Reet Kamal Tiwari, Shri Jagjit Singh Kochar, Shri Devendra Kaushik, Dr. Neelkanth Nirmalkar, Kalyani Agarwal, Priya

