## FROM THE EDITOR'S DESK

## My dear readers of Journal of Extension Education,

In the previous issue of JEE (*JEE-33-3*) , we discussed what the governments, agricultural development organizations, entrepreneurs and academics need to do for improving data-driven agriculture.

Yu et al (2021) have however expressed concerns that farmers may lose ownership and control of their raw data (such as soil moisture data from a farm) from which ATP - Agriculture Technology Providers (who develop or introduce the advanced technologies to help farmers better manage their farming opera ons ) derive high-value products. The farming data with ownership concerns is mainly raw data that helps in decision-making. Hence, in order to help the farmers in owning their raw data, the following few privacy and security principles have been derived.

**Education**: Resources, Courses, and Extension workshops need to be provided to help farmers learn more about the data collection processes on their farms

**Ownership**: When uploading data to ATP portals, it is the farmers' responsibility to determine whether the ATP owns this data or has permission to access.

**Collection, Access and Control**: These are the fundamental ac ons surrounding data, the rights of which should be explicitly described in the contracts between farmers and ATPs.

**Notice**: The contract for the partnership should clearly state who will collect, control, or access the data, as well as why, how, and when.

**Transparency and Consistency**: Contracts should be written in a clear, concise, and consistent manner to ensure full comprehension.

**Choice**: The explanations of farmers' choices in purchasing different kinds of services, usually addi onal packages, offered by ATPs are important.

**Portability**: Farmers should have the right and ability to use their data across different applica ons for more opportunities and improvement of data values.

**Terms and Definitions**: Farmers and ATPs should clearly understand the defini ons of all the terms of their contracts.

**Disclosure, Use and Sale Limitation**: Farmers' agreement is required for the sharing or sale of the original farming data to a third party.

**Data Retention and Availability**: The length of the existence of farming data in an ATP's system needs to be defined clearly, as well as how the data will be treated afterward (i.e., removed, returned, or destroyed).

**Contract Termination**: The contract should state what will happen to the data if an agreement is cancelled.

As the problems of data ownership are likely to crop up in the coming years, we, as extension professionals, need to keep the aforementioned principles in mind and should make the farmers aware of their data ownership and allay their fears.

This issue of JEE has papers on topics such as attitude of doctoral students towards research, economic mo va on among the dairy entrepreneurs and the impact of agricultural extension ins tu ons on farm efficiency. Do send your feedback on these papers to editorextension@gmail.com

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