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Venue : Dwarkinath Hall  
Time : 9:30 AM  
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**Seminar-II**  
on  
**Application of Behavioural Economics in Extension Research**  
*Synopsis*

Economics runs the world whereas the behavioural economics combines elements of economics and psychology to understand how and why people behave the way they do in the real world. It differs from classical economics, which assumes that most people have well-defined preferences and make well-informed, self-interested decisions based on the preferences. The Nobel laureate Richard Thaler, from University of Chicago, did a field defining work on behavioral economics examines the differences between what people “should” do and what they actually do and the consequences of those actions. Behavioural economics theories and principles can improve the way we present options to clients, increasing the likelihood of them choosing desirable behaviors. Choice architecture is a behavior-change tool employed by behavioral economists. Choice architecture refers to intentionally changing a decision-making environment (such as the presentation, timing, or context) to influence a decision. Since Extension education is an applied science deals with the creation, transmission and unravel decision-making behaviour of the farmers or other stake holders takes it to an extra mile to ace the progress on the bright side.

With this brief background, the current seminar has been conceptualized with the following objective:

1. To know the concept of classical and behavioural economics
2. To understand theories and tools of behavioural economics and its application in extension research
3. To review the related research studies

**Concept of Classical and Behavioural economics:**

Classical economics is put forth by Adam Smith where he assumes that humans are rational in production, distribution, exchange and consumption due to well defined preferences and self-interested decisions which do not measure up to the real life. Whereas, behavioural economics combines the elements of economics and psychology to understand how and why people behave the way they do and their biases in the real world which takes into account of limited access to information, limited computational capacities of the individual and the influence of the decision making context, emotions and feelings on the individual’s decisions so on and so forth.

**Various theories and tools of Behavioural economics:**

- Bounded rationality theory, Nudge theory, Prospect theory
- Tools of behavioural economics are like Framing effect, Anchoring bias, Certainty effect, Decoy effect, Irrational behaviour etc

**Application of behavioural economics in extension research:**

Extension scientist often are victims of ‘confirmation bias’. Behavioural Economics helps extension researcher to identify and study biases of farmers and other stakeholders in decision

making, which helps extension professionals to modify choice environment to support positive decision making to induce farmers to adopt new technologies, to promote agribusiness and agri-entrepreneurship to induce farmers to opt for crop insurances etc. There should be capacity building of extension professionals to make use of behavioural economics theories to unravel decision-making behaviour of farmers and to frame suitable policies for better adoption of technologies and other development interventions.

### **Research studies:**

Esther *et al.* (2011) in their empirical study revealed that small, time-limited discounts in the cost of fertilizers at the time of production induce substantial increase in fertilizer use, compared to those induced by much larger price reductions later in the season. They concluded that a small, time bound discount programme on fertilizer could be an effective, easy to scale up policy that can encourage fertilizer use without distorting decision making and inducing excessive use of fertilizers.

Anandi *et al.* (2013) hypothesize that poverty directly impedes cognitive function. They examined the cognitive function of farmers across the planting cycle. It was found that the same farmer was poor before harvest of the crop shows diminished cognitive performance, as compared with after harvest of the produce. Although farmers showed more stress before harvest, that does not account for diminished cognitive performance. Instead, it appears that poverty itself reduces cognitive capacity. These results help explain a spectrum of behaviors among the poor.

Pickering *et al.* (2020) in their study on why behavioural sciences matters in extension had significantly found that attitudes and behaviour are influenced by their social groups and established a behavioural science training model to 57 extension professionals which resulted in increasing the participants ability to understand farmers psychology and ways to overcome resistance to change by farmers.

### **Conclusion:**

In the era of rapid competition, where economics is very important to the daily lives of farmers behavioural economics play a world of difference in voluntary behavioural change in many aspects of farmers behavior such as income, cost of production, marketing services, credit and insurances etc, which is an important outcome of both extension programming and social sciences. The use of behavioral economics can help to reduce chances of selecting less desirable behaviors and help people to make good choices with minimal cognitive effort. They are relatively simple to integrate into extension programs and it may result in increased adoption of desirable behaviors in rational and also humanistic way.

### **References:**

- ANANDI,M., MULLAINATHAN,S., SHAFIR.E., AND ZHAO,J., 2013, Poverty impedes cognitive function. *Science*. **341**(6149):976-980.
- ESTHER,D., KREMER,M., AND ROBINSON, J., 2011, Nudging farmers to use fertilizers: theory and experimental evidence from Kenya. *Am Econ Rev.*, 101:2350-2390.
- PICKERING,J., JENNER,A., HAANTERA,K., MOORE,S., ISEPPI,C. AND MARKEY, B., 2020,Why behavioural science matters in extension. *Rural extension and innovation system*, **16**(1):330-340