

Capacity of Farmers to Pay for Extension Services

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ABSTRACT

The research study was conducted in randomly selected villages of districts Kanpur Nagar and Ramabai Nagar of central Uttar Pradesh. For the collection of data, 100 respondents were randomly selected from each district. Thus, a total of 200 respondents were selected for identifying the mechanism, capacity and willingness of farmers to pay for various extension services and enterprises. The study revealed that about 30 per cent farmers possessed the capacity to pay for various extension services while willingness to pay for extension services depended upon severity & urgency of the problems and also on the possibility of economic returns from a particular advice. The study also brought out that the farmers were willing to pay for advice and services in Animal Husbandry & veterinary sector. Growing of cash crops especially vegetables and seed production of important crops was another area for which farmers were ready to pay. The farmers were also ready to accept a reasonable levy charged on certain agricultural products as fee after crop's harvesting and cost sharing by group of farmers.

Key words: Private extension service, capacity, willingness, mechanism for payment, paid services.

Agriculture is the largest private enterprise of India, but in past decades most important technological research, development and extension work were carried out by public institutions like agricultural institutes/universities/ research centers/ development cum extension departments. Almost all the services provided by public extension system have been traditionally free of cost except soil testing, input cost of field demonstration, etc. Due to globalization and liberalization, private sector firms have increased their investment in agricultural research and development. Consequently, new technological inputs (seeds, chemicals, equipment) have increasingly become "Private" rather than "Public" goods (Anonymous, 1991). The increasing cost of providing services and unwillingness of government to fully support the line departments of various extension services, wide ratio between extension worker and farmer, inadequate infrastructure and financial burden on government (Dinar, 1996; Vanden Ban & Hawkins, 1996) are major factors initiating private to play major role. The gap is widening day by day between demand and supply of extension services like input

delivery, advisory, diagnostic, infrastructural and technological. In the interest of farmers, this gap has to be filled up by private extension and already filled to some extent (P. Chandra Shekara, 2001). Today many private extension players/agencies are providing various agricultural extension services in different parts of India. P. Chandra Shekara (2001) identified different players - agricultural consultants, agricultural consultancy firms, progressive farmers, farmers organization/ co-operatives, non-governmental organization (NGOs), Krishi Vigyan Kendras (KVKs), agri-business companies, input dealers, news papers, etc. These extension agencies are providing various agricultural extension services on fees or free basis. Free of cost agricultural extension services are mostly provided by NGOs, farmer organizations, farmers co-operatives, etc. Consultancy firms charge service cost directly from the client. Farmers are ready to pay for knowing cost effective technologies which have sustainability and also relative advantages but farmers believe more in concept of 'use now & pay later; because of poor economic conditions. Considering these

issues, a study was planned to find out the capacity of farmers to pay for extension services.

METHODOLOGY

Out of nine agro-climatic zone of Uttar Pradesh, one zone namely central plain zone was selected purposively for the study. Two districts one influenced by peri-urban agriculture and other by rural agriculture were selected purposively. Thus, district Kanpur Nagar characterized by the peri-urban agriculture and Ramabai Nagar representing rural agriculture were selected for the present investigation. The purpose of the selection of these districts were availability of all infrastructural network like research, extension, development and more availability of private and public extension agencies. From each district one block was randomly selected and 100 farmers were included as respondents from randomly selected villages. Thus, a total of 200 respondents were selected for interviewing and obtaining necessary information. The collected data were tabulated and economic scale developed by *Trivedi (1963)* was used with certain modification for knowing the capacity of farmers. The willingness of farmers to pay for extension services was measured with the help of ‘marketing approach’ methods developed by *Ingram(1992)* with certain modification. For knowing the demand for paid services the empirical measures like mean, rank order and percentage were used.

RESULTS AND DISCUSSION

Capacity of farmers to pay for extension services : Capacity denotes economic status of the farmers. Economic position was assessed with the help of measurement scale developed by *Trivedi (1963)* with some modification. The information regarding economic status was analyzed to determine the capacity based on score value obtained. Farmers were categorized in to different capacity groups:

It is clear from Table 1, that 46.5 per cent farmers were found under fair economic status group followed by 24 per cent belonging to poor economic status group and 22.5 percent to good economic status group. Only 7 percent farmers were found falling under better economic group. The findings indicated that about 30 percent farmers were having good or better economic status showing their capacity to pay for extension services. However, majority of the farmers possessed

low economic status showing their poor capacity to pay of extension services.

Table 1. Categorization of farmers into different capacity groups. (N=200)

S. No.	Economic Status of farmers	Range of score value	No.	%
1	Poor	1-10	48	24.0
2	Fair	11-20	93	46.5
3	Good	21-30	45	22.5
4	Better	31-40	14	07.0
	Total	-	200	100

Willingness of farmers to pay for extension services: For knowing willingness to pay, a hypothetical scenario was created for respondents /clients. The ‘marketing approach’ followed by *Ingram (1920)* was used to understand the willingness of farmers to pay for extension services. The data obtained regarding willingness was analyzed and presented here.

Table 2. Willingness of farmers to pay for various extensions services (%). (N=200)

S. No.	Type of information /services for which clients are ready to pay	%
1	Advice to solve specific problem in the field	54
2	Advice on plant protection measures.	76
3	Advice on weed management	63
4	Advice for water harvesting & irrigation management including micro irrigation	22
5	Advice about sodic land reclamation.	31
6	Purity/quality analysis of soil, water, seeds, fertilizers, etc.	29
7	Training for seed production technique.	59
8	Vegetables production/ flower production.	17
9	Orchard management.	12
10	Bio-fertilizers (vermi composting) & Bio-Pesticide production.	42
11	Animal Husbandry management.	60
12	Beep Keeping.	21
13	Poultry farming.	14
14	Mushroom production.	18
15	Fish/ piggery production.	03

Table 2 indicates that highest i.e. 76 percent farmers were ready to pay for advice on plant protection measures followed by 63 percent farmers were willing to pay for advice on weed management and 60 percent to pay for animal husbandry management.

However, 59 percent farmers were ready to pay for obtaining training in seed production techniques followed by 54%, 42%, 31%, 29%, 22%, 21%, 18%,

17%, 14%, 12%, and 3% farmers willing to pay for specific advice in the area of bio-fertilizers (vermi composting) and bio-pesticide production, sodic land reclamation, analysis (soil, water, seed, fertilizers. etc.), water harvesting and irrigation management, bee keeping, mushroom production, vegetable and flower production, poultry farming, orchard management, and fish/piggery production, respectively.

Enterprises having high demand for paid services: Table 3 indicates that demand for paid services is ununiform for different enterprises. The demand was more in A.H. and Veterinary services with mean value of 2.99 followed by for vegetables, seed production and poultry farming with mean values of 2.97, 2.97 and 2.52. Rest other enterprises Like plant nurseries ,orchards, flower production, crop production, bee keeping, mushroom production and piggeries were having mean values between 1.92 to 1.33. Venkat Kumar. *et al.* (2002) found that 28.29% of the farmers preferred paid services for commercial crops.

Table 3. Enterprises having high demand for paid services. (N=200)

S No.	Enterprises	Respondents view	
		Mean	Rank
1	A.H. and veterinary services	2.99	I
2	Cash crops specially vegetables.	2.97	II
3	Seed production	2.97	II
4	Plant nursery/ orchard/flower production	1.97	IV
5	Poultry farming	2.52	III
6	Mushroom production	1.79	VII
7	Bee keeping	1.81	VI
8	Piggeries	1.33	VIII
9	Crop Production	1.33	V

Mechanism for payment : Table 4 indicates the mechanism of payment in which maximum 46 percent farmers agreed that effect of treatment/advice and its economic viability should be the basic criteria for payment. 39 percent farmers were of the opinion for reasonable levy charge on certain agricultural products

as fee after crop harvesting. Similarly, varied opinions emerged for different ways & means to be followed for payment. The study conducted in states of Maharashtra, Rajasthan and Kerala by R. Sulaiman, V. and Sadamate, V.V.(2000) reported that 32.6%, 47.5% and 38.7% (statewise) farmers preferred advice based on field visit.

Table 4. mechanism for payment (N=200)

S.No.	Mechanism	%	Rank
1	Effect of treatment/ advice	46	I
2	A reasonable levy charged on certain agricultural produces as fee after crop harvesting.	39	II
3	Cost sharing by group of farmers.	34	III
4	Advice based on field visit.	32	IV
5	Expert advice made available from a fixed place.	30	V
6	Seasonal/ annual contract system	26	VI
7	The firm to provide receipt for the payment	14	VII
8	Advice for individual	12	VIII

CONCLUSION

Majority of the farmers possessed low economic status showing their poor capacity to pay for extension services. However, about 30 percent farmers were having good or better economic status showing their capacity to pay for input delivery, advisory and diagnostic services. Severity and urgency of the problems and possibility of economic return from a particular service are the major criteria of willingness of farmers to pay for these services. The highest number of farmers agreed for paid services in animal husbandry & veterinary followed by growing of cash crop specially vegetables and seed production on conditions like effect of treatment/ advice and its economic viability. A reasonable levy charged on certain agricultural products as fee after crop harvesting and cost sharing by group of farmers were other options for payment in the opinion of farmers.

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