

Extension Professional Staffs' Attitudes toward an Indigenous Knowledge Base: Implication for Appropriate Technology Development

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Abstract

The desired change would depend to a great extent on the speed with which the technologies and innovations are made available to the ultimate unit of their utilization. If the technologies could fit well with current farming methods and users could understand clearly, being economically feasible to use, then small farmers accept and apply the innovations in their daily practices. It must be stressed that a large number of innovations in farming are being released without having the mentioned characteristics, so the innovations end up not being adopted by small farmers. In order to avoid delay in technology adoption and eliminate inaction, farmers' needs, and their indigenous knowledge base should be taken into consideration. Extension workers who function as a link between farmers and research institutes, are in a proper position to take farmers' indigenous knowledge to research scientists. By utilization and integration of indigenous knowledge base, agricultural scientists could develop an appropriate technologies or innovations suitable for small farmers' condition. The main purpose of this study was to assess the extension workers' attitude toward indigenous knowledge and determine its relation with the extension workers' professional characteristics (\bar{x}); and determine how much of the variance in extension workers' attitude could be explained by independent variables of the study (R^2). The population of this study consisted of all 300-extension workers in the province of Azarbaijan, which is a northwestern province in Iran. By a complete randomized sampling technique, 210 of the staff were selected for the study. After a second following up on the participants, an 81.42% return rate was achieved for the study. Examining the differences between early and late respondent; and between respondent and non-respondents indicated no statistically significant differences on dependent variables measured. A questionnaire was designed to measure the professional staffs' attitude toward indigenous knowledge base. Content validity of the attitude questionnaire was achieved by panel of experts in the field of agricultural extension and rural sociology. A pilot study was conducted to determine the reliability of the questionnaires for this study. A Cronbach Alpha, reliability coefficient of 0.81 was achieved for the questionnaire.

The result indicated that the majority of extension workers' attitude toward indigenous knowledge was classified in a "positive" range. This indicates that the professional staffs have a great potential in helping to develop appropriate technology utilizing indigenous knowledge base. The participants' age ($r=0.34$) and their duration of stay in village ($r=0.22$) showed to have a statistically significant association with their attitude toward indigenous knowledge base. This implied as the extension workers get older and spent more time in rural area, their attitude toward indigenous knowledge base showed to be more positive. Extension workers' level of involvement in participatory extension approach showed to have a statistically significant association ($r=0.13$) with their attitude toward extension workers' attitude toward indigenous knowledge base. Similarly, extension workers' attitude toward indigenous knowledge base showed to have a significant association with their attitude toward participatory activities with agricultural researchers ($r=0.18$). Multivariate Linear Regression result indicated that extension workers' level of involvement in participatory extension approach, and their duration of stay in rural area explained 28% ($R^2=0.28$) of the variance in extension workers' attitude toward indigenous knowledge base. This implied that there might be other variables that could affect extension workers' attitude toward indigenous knowledge base that were not included in this study. The finding of this research could help and guide the management of extension organization to use a proper condition for utilization of indigenous knowledge base in development of appropriate innovation and technologies that promote sustainable agricultural and rural development.