



Assessment of linkages and information flow in the agricultural innovation system in the New Valley governorate, Egypt

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Abstract:

The purpose of this study was to 1) assess the linkages in the New Valley's Agricultural Innovation System (NVAIS) and 2) characterize the information structure underlying the system. Data were collected from 50 respondents representing the nine components of the studied system during the period from Feb. to Mar. 2015 using in-depth interviews. The graph theoretical technique (GTT) was used to assess the linkages and information structures in the studied system. The obtained results showed that NVAIS was not fully identified; however, 44 of a total 72 linkages only were identified, and have a density of 0.61. Only 14 linkages are established through specific linkage mechanisms so density declines to 0.19. The component "Observatory of Development and cooperatives (O)" is by far the main sender of information, followed by the component "Extension (E)" and "Higher Education (H)". The main receivers of information, is the component of "Farmers (F)". Components of "Research (R)" and "Policy (P)" have a special position in this system, being the most interactive components as it sends as much information as it receives from others. Components of Secondary agricultural schools (S) and Agricultural Credit (C) are candidates to reform because of they interacts other components at a low tone. The component of private input supply, marketing and processing (M) is isolated and needs to deal efforts on enhancing its interaction within other components of the system. Any interventions on the components of O or F will be reflected in all over the system because the first one is a dominant component while the second is subordinate. The intermediary institutions, O and E, should play a more active role in bringing together other components. Specifically, links between these components could be strengthened through policy dialogues where the O and E could pass information from S, F, M, and C to P, H and R; such transmission of information should help P, R and H reassess agricultural policy, research and education priorities.

Keywords:

Agricultural innovation system, linkages, information flow, Graph-theoretical technique, Egypt

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