

Chapter 10

Future Scope of this Research

The new age extension science, in an exponential manner, has to undergo an ontime transformation, sometimes may be a metamorphosis either, in its approach towards ecology and energy dynamics. Days are gone, when management of fertilizer and pesticide were the only determinants in the arena of extension, but the issues of energy are expected to overshadow this mundane tradition.

The present study has been a modest attempt to audit on the happening energy metabolism, that is, a subtle balance between energy invested and energy generated from per unit farm functioning. So, the future research has to go further to standardize this energy auditing and energy monitoring while prescribing, what we may call the package of practices.

In a redefined regime of farm productivity, quintals per hectare or kilo joules per hectare can go interchangeably to frame of the orchestrations of efficient factor production leading to a sustainable energy echelons, effectively apply with pro energy approach in farm production management.

While extension science is having a new mode travel, from material input to energy and from energy to ecological drivers, a new model will be the prerequisites for furthering the *energy extension research!*

In the phase of escalating energy crisis scenario, wherein the farm sector is going to be the most vulnerable, the conservation of energy is recycling and cost effectiveness will count the most and in this regard energy economics and the sociology of energy management are going to tantamount to the present fragile interdependence and input versus output interaction.

All the crop productivities, rice or wheat; rose or vegetables are nothing but a well configured display of energy capsules which has already arrested photons from the solar systems against an expenditure of chemical fertilizers, flown into the farm field in the form of inputs. But the emission of energy is a continuous process. So against this unabated continuity, what would be the extension system model to relegate an energy saving agriculture! The new age extension research is better prepared to answer this by following the innovative extension research model, as may humbly be proposed-

1. System behaviour of farm energy dynamics
2. Cataloguing of farms based on level of energy metabolism
3. Farmers capacity building and info of humane skills into the technicality of energy management
4. Hunting alternative source of energy, non-conventional source, solar, bio fuel etc in the process of farm function management and securing energy economy
5. The micro models all developed through small and fragmented farm energy research can be co-integrated to develop a mega level energy saving, heavy load agriculture to feed the millions for the present, and, of course, for the posterity.