GS-I: Stirring up the truth about ZBNF

News

Zero Budget Natural Farming has no scientific validation and its inclusion into agricultural policy appears unwise. Most criticisms of modern agricultural practices are criticism of post-Liebig developments in agricultural science.

What is Zero Budget Natural Farming?

- Zero Budget Natural farming (ZBNF) is said to be “do nothing farming”.
- It involves the application of nature’s principles in farming.
- It practises no-till, no chemical use in farming.
- Alongside, dispersal of clay seed balls to propagate plants is done.

The key aspects integral to it and which require locally available materials are:

1. Seeds treated with cow dung and urine
2. Soil rejuvenated with cow dung, cow urine and other local materials to increase microbes
3. Cover crops, straw and other organic matter to retain soil moisture and build humus
4. Soil aeration for favourable soil conditions

- These methods are combined with natural insect management methods when required.
- The ZBNF is a technology of the future with a traditional idiom.

Importance of ZBNF highlighted in Economic Survey 2018-19:

- The Economic Survey mentioned Zero Budget Natural Farming (ZBNF) along with Vedic Farming, Homa Farming and Cow Farming and how these “climate friendly” agricultural practices can enable “elimination of chemical pesticides” and restoration of soil organic matter and fertility.
- But an even bigger push for ZBNF and in the Union Budget speech of Finance Minister, where she talked of the need to “go back to basics” and “replicate this innovative model (that) can help in doubling our farmers’ income in time for our 75th year of Independence”.

ZBNF success in Southern states:

- In Andhra Pradesh: With its combination of delta regions, arid and hilly tribal areas, districts in Andhra Pradesh are similar to those in other parts of the country and could therefore serve as a model for replication.
- The approach taken to monitor the improvements is vital to understanding the outcomes of large-scale changes that are under way; this is critical to expanding the ZBNF to other States. As ZBNF is applied in India’s various agro-ecological zones, making farmers the innovators is essential.
- Resilient food systems are the need of the day given the variability of the monsoons due to global warming and declining groundwater in large parts of India.
- The drought-prone Rayalaseema region (Andhra Pradesh) is reportedly seeing promising
changes already in farms with the ZBNF.

Conclusion:

- The programme can have a positive effect on many of the sustainable development goals.
- As ZBNF is applied in India’s various agro-ecological zones, making farmers the innovators is essential.
- Agricultural scientists in India have to rework their strategy so that farming is in consonance with nature.
- The dominant paradigm of chemical-based agriculture has failed and regenerative agriculture is the emerging new science.