

# ZERO BUDGET NATURAL FARMING (ZBNF)

## CATEGORY:

POLICY RESEARCH FIELD CLIMATE

## LOCATION/SCALE:

India (Sub-national)

## IMPLEMENTING ORGANISATION:

Rythu Sadhikara Samstha (RySS)

## PERIOD:

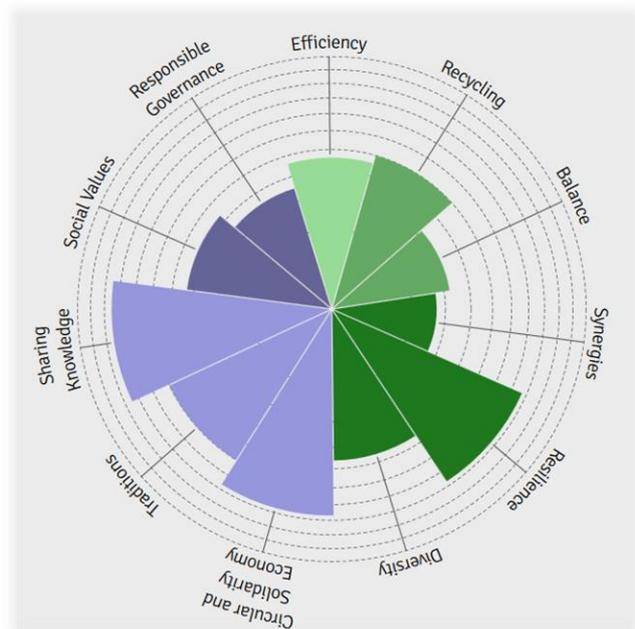
2015 - now

## SUMMARY/IN A NUTSHELL

ZBNF has a dual character: **It is a peasant movement and a compilation and dissemination of farming methods.** It promotes an inclusive farming system, where the soil or the farm provides all the needed nutrients for an effective and healthy food production.

A precondition for the approach proposed is that farmer's should own land, at least one cow and have access to some kind of irrigation. Based on that are the four pillars of farming methods, which increase efficiency and sustainability of the food production.

Over all, the aspect of **low cost farming and resilience to climate change** for smallholder farmers is the core of ZBNF. For dissemination, the movement is self-organized and the farmers are informally connected to each other (e.g. WhatsApp).



**Figure: Assessment of ZBNF based on FAO Elements of Agroecology and the five levels of food system change by S. Gliessman**



## CONTEXT

In 2016, 59% of India's workforce was working in the agricultural sector. India is heavily influenced by climate change and farmers in India are facing a vicious circle of credits and debt that leads to a high rate of depression and suicide. The change in Indian economy has led to seed privatization and high costs for farming products. That is the reason why there is a need for new farming methods with little or no external inputs, which are more resilient to climate change.

## OBJECTIVE

With ZBNF, farmers should become independent from external inputs. It promotes that all the nutrients needed are available in the soil and do not need to be added to the system from outside. This approach helps small-scale farmers to exit the vicious cycle of debt using natural farming and increase the resiliency of the farming system itself.

## KEY INTERVENTIONS/RESEARCH

### FARM LEVEL :

- Fermented microbial structure consisting of water, cow dung and urine, jiggery (raw sugar), pulse flour and soil (Jiwamrita)  
Provides nutrients, promotes activity of earthworms and microorganisms and helps to prevent fungal and bacterial diseases
- Seed treatment consisting of water, cow dung and urine, lime and soil. (Bijamrita)
- Mulching, avoiding deep ploughing (Acchadana)
- Condition with perfect mix between air and water vapour in the soil. Achieved by reducing irrigation and only irrigating at noon (Waaphasa)
- Intercropping/Agroforestry
- Contours/Bunds to preserve water

### REGIONAL/NATIONAL LEVEL :

- Informal farmer-farmer communication, e.g. WhatsApp-groups to share practises
- Master farmers who practise what they preach and teach other farmers
- Training camps and video tutorials
- Political support, Andhra Pradesh (Indian state) with the goal of reaching 6 million farms by 2024

## LESSONS LEARNED/CHALLENGES

The main challenge is the lack of support from the universities and the national government. Although heavily supported by the state, the national government does not see agroecology as a key to solving India's food challenges.

## FURTHER LINKS & REFERENCES

- FAO: "Zero Budget Natural Farming in India"  
<http://www.fao.org/3/a-bl990e.pdf>
- UN Environment: "Andhra Pradesh to become India's first Zero Budget Natural Farming state"  
<https://www.unenvironment.org/news-and-stories/press-release/andhra-pradesh-become-indias-first-zero-budget-natural-farming-state>
- Rythu Sadhikara Samstha: "Zero Budget Natural Farming"  
<http://apzbnf.in/>

