

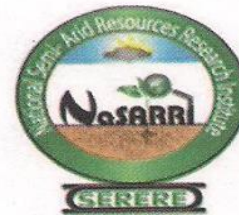
Sharing key learnings on Zero budget natural farming of India

To the McKnight CCRP Family

By

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CCRP Sorghum and Cereals FRN Uganda



Learning from India

- Learning sites during the exchange
 - Amrita Bhoomi school in Karnataka state on Zero Budget Natural Farming
 - Fireflies intercultural center- Sharing by Agroecology actors funded by AEF
 - Field visits to Ecology school, and farmers on Zero Budget Natural farming- Karnataka & Andhra Pradesh

Striking themes that emerged during AE learning exchange

- Farmer movt-ZBNF ideology of Subash Palekar got linked to (KRRS)-Karnataka state
- Rethinking cultural values and reconnect with health and nutrition (Hindu culture)
- Agrobiodiversity for resilient farming systems
- Resource use efficiency-water
- Soil microbiome enhancement
- Seed sovereignty and exchanges

AE landscape in India

- Changing R&D trajectory (Bottom-up action research)
 - Transformational approach
 - *Revert to use of local on-farm resources; 100%*
 - *Rural markets, Producer to consumer linkages*
 - *System wide focus rather than addressing isolated problems*



Light moment with champions of rural farmer markets

AE landscape in India

- Capacity building of practitioners- Farm resource persons for Institutions & Markets;
 - *Graduates & Master farmer trainers undergo training in ZBNF & model farm is a req't for one to be a trainer!*

Visit to farmer groups under guidance of ZBNF graduate trainees



AE landscape in India

- Biodiversity focus on; soil, env't, nutrition and financial returns



Natural farming offers food diversity for good nutrition



Pelleted seeds ready for planting

Solid Microbial Inoculants for seed pelleting and addition to soil

AE landscape in India

- Agroecology linked to traditional and cultural values



Local harvest festival- the event is as well used to give out seeds to other community members



Trunk painting- Local knowledge of pest mgt in coconut tree



The Hindu traditional/local plates for food

AE landscape in India

- Farmer movements;
Women SHGs with financial inclusion-VOs and clusters drive ZBNF scale up
- Agroecology schools and research centers building capacity of graduates and interested persons on ZBNF



A member of the Self Help group presenting about her five layer garden

AE landscape in India

- Emerging social org within Government for ZBNF (GovNGO)
- Scientific teams on ZBNF meet yearly to review ZBNF innovations and revise research protocols-Ecology school @Andra Pradesh- transition to ZBNF takes about 3yrs

AE landscape in India

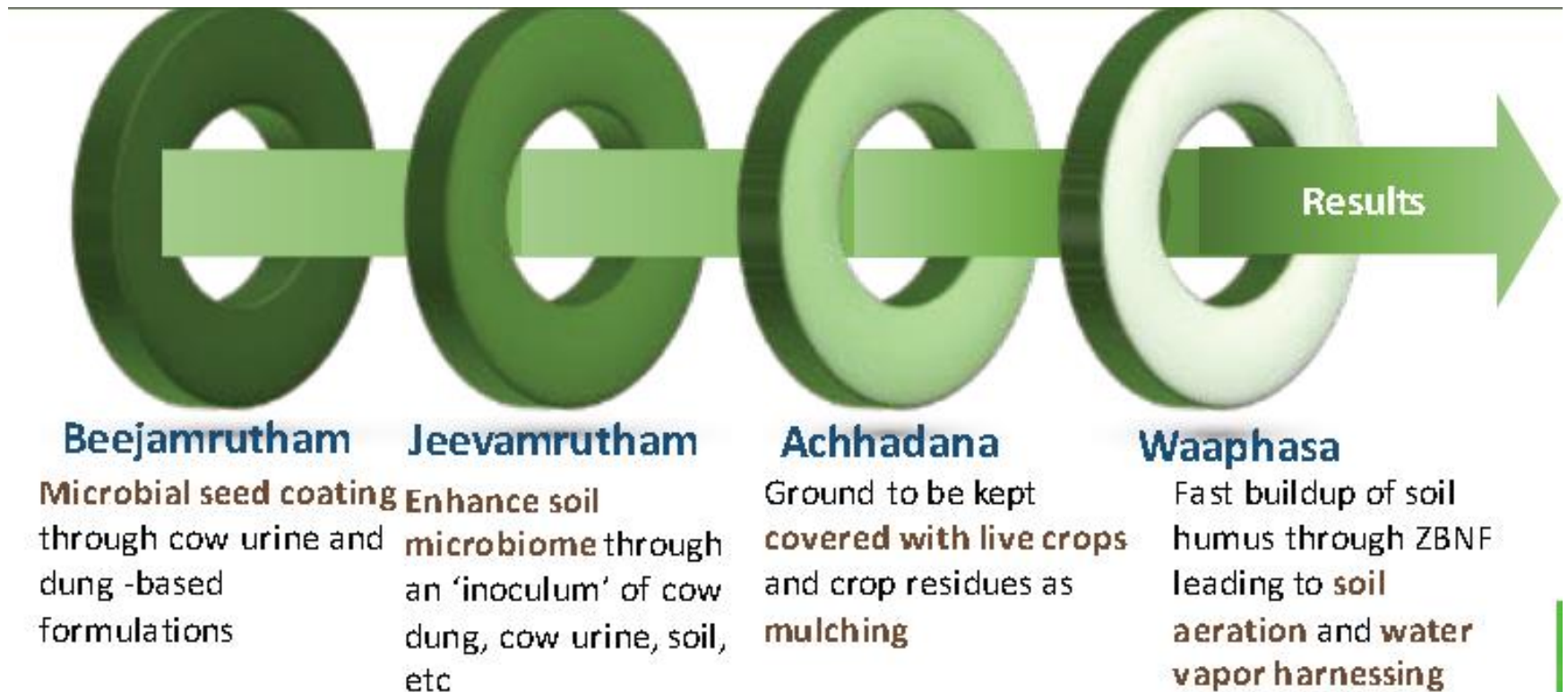
- Seed diversity preservation and exchanges led by farmers-awards to diversity champions
- There is solidarity economy (Village & Urban dwellers eating the same quality of food)



Same quality of agricultural produce is sold in both rural and urban markets

Agroecology landscape

- Research on ZBNF practices is highly motivated by on-farm challenges



Subrash Palekar-Four wheels of ZBNF

AE landscape in India

- SHGs promote innovations
 - *Simple planters and weeders*
 - *Insect pest traps (Yellow and white traps)*
 - *Grain cleaning*
 - *Seed pelleting with microbial inoculants*
 - *Pre-monsoon/dry planting*
- Value addition is emerging & spearheaded by Women led NGOs
- Knowledge dissemination on ZBNF thru Video trainings



Locally fabricated legume seeds planter



Locally made insect pest trap

Commonalities with CCRP

- FRNs are farmer movements
- Soil management is part of our work; Cereal-legume integration in Uganda and Kenya
- Seed sovereignty is our aspiration
- Regular reviews and adaptive learning; project reviews, planning meetings and CoP
- Cultural values are implied within social context thinking
- Community extension system is part of CCRP Uganda projects

Some differences from CCRP approach

- Indian ZBNF is focused on transforming the whole farming land to a diversified ecosystem
- Multiple cropping within a plot is given high priority
- Ecosystem services from diversified fields highly considered
- ZBNF philosophical with major target on soil, local resources and diversity
- ZBNF research is not engaging array scientists directly
- Data generated from the research trials is small N

CCRP projects can adopt

- Research to embrace production system sustainable resilience; soil health, pests and disease mgt, environment mgt-holistic approach
- Building complementarities b/n crop and livestock in our research
- Think of marketing models for farmer research products
- Enhance financial inclusion in FRN work to promote technical innovations
- More links with AE actors for advocacy for multi-actor involvement

Appreciation!

- Regional Team-ESAF CoP for Nomination and consideration to the learning exchange
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