

Agroecology, Zero Budget Natural Farming (ZBNF) and Agrarian Transition: Current Debate in India

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Introduction

The article contributes to current debate on conditions for ecologically sound and socially just contributions of agroecology to agrarian transition in India². The attempt of current government to sell the Zero Budget Natural Farming (ZBNF) model as an alternate path to agrarian development is critically evaluated. The ZBNF model has been widely suspected for quite a number of reasons in the farmers' movement and among the members of agricultural science community³. Expectations of the agroecology movement from the National Mission on Natural Farming (NMNF) are a critical part of the problem. The ZBNF advocates need to rethink the national mission to get a realistic contribution⁴. The NMNF proponents cannot ignore the constraints of Indian agrarian structure. The adverse implications of the growing collaboration of the corporate capital with the landlord capitalists need to be taken into account. Together these classes can be expected to gain a greater control over land use, crop residues, animal dung and agricultural "wastes" through the process of commodification of biomass that the Gobardhan, bio-input resource centres (BRCs) and PM-Pranam schemes are going to end up introducing in the absence of regeneration of the commons in India.

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² Divide within the agroecology movement is widening. This is because some of the proponents of agroecology view favourably the move of Modi Government to make the implementation of Zero Budget Natural Farming (ZBNF) through the National Mission on Natural Farming (NMNF) and have even chosen to oppose the farmers' movement demand for legalizing minimum support price (MSP) through legislation to be passed by the Indian parliament. They are also ready to support a sharp reduction envisaged in the state support for chemical fertilizers. They do not want the government to continue with the centralized system of public procurement and the food subsidy benefiting the rice and wheat producing farmers. They are in favour of the redistribution of as existing state support on pro-rata basis for fertilizer and food grains through the state governments. They prefer the mechanism of direct income support. Further in their view three farm laws that the Modi government promulgated were an important step in the direction of introducing a level playing field for the benefit of agro-ecological approaches that the farmers' movement is not willing to accept.

³ In the latest Union Government budget of 2023-24 the support for natural farming is mere Rupees 459 per farmer. While the NMNF has a target to extend ZBNF as an alternate path to agrarian development to one crore farmers, but the direct and indirect support being made available by the government for natural farming (NF) is negligible under the NMNF. There is also the PM Pranaam scheme under which the state governments are expected to invest in the promotion of agroecological approaches. The scheme provides for the reimbursement of 50 % of savings made in chemical fertilizer subsidy as direct support to states for investing in natural farming. The farmers' movement views this scheme as the beginning of removal of chemical fertilizer subsidy. Further as out of this support the reimbursement of 30 % is only stipulated to be passed on as direct support to farmers even the proponents of ZBNF consider this institutional arrangement to be insufficient.

⁴ The NMNF proposes to build the strategy of implementation on the lines of the model of Zero Budget Natural Farming (ZBNF) under practice in Andhra Pradesh. ZBNF practices use biomass mulching, round the year green cover, multi-species green manuring, use of on-farm desi cow dung-urine formulations (such as Bijamrit, Jivamrit, Ghanjivamritetc) for nutrient and soil fertility management, use of diversity, that ZBNF has the potential to fix the agrarian crisis. The ZBNF models utilize local resources and achieves a reduction in the cost of cultivation though a process that has the possibility to trigger a new process of primitive accumulation. The claim to provide freedom to farmers from the use of externally purchased inputs and zero cost of natural farming need to be viewed as also a legitimizing device.

Currently the cheap nature view is built into the input correction emphasis and the zero budgets thrust of the model under implementation through the NMNF. This will ultimately prevent the NMNF from tackling the landscape, structural and system level challenges of agrarian transformation. Significant barriers to the adoption of agroecological approaches are expected to come up due to the lack of commitment on the part of ruling classes to protection of commons and public investment in soil conservation and water management, absence of institutions required for integrative landscape planning, linking of rural producers with urban consumers of food for waste recycling, insufficiency of on-farm regeneration of nutrients and nonexistence of support from the national system of agricultural research system for agroecological approaches. For agroecology to make its ecologically and socially just contribution as a social movement, practice and science the peoples' democratic path will have to be pursued ultimately. The Indian imperative is clear, landless peasant and rural labour should gain far more from the wider adoption of agroecological approaches.

The ZBNF ideal of self-sufficient and autonomous farmer can itself be expected to emerge as a barrier to the development of ecologically and socially just contributions of agroecology in the Indian case. In the absence of land redistribution and secure tenancy primary productivity of the agro-ecosystems can be expected to suffer further. The experience of organic farming and shifting (jhum) cultivation in the North-eastern states can be cited as evidence of how the dynamic of primary productivity in the face of jhum cycle shortening can rapidly deteriorate. Since the National Mission on Natural Farming (NMNF) is expected to promote the ideal of "self-sufficient" and "autonomous" farmers along with the track of bio-input resource centres (BRCs) tied to the development of compressed biogas (CBG) for use in automotive vehicles this specific policy development can also be expected to accelerate the process of commodification of biological resources in India. The ecologically and socially just contributions of agroecology require a system of multi-level planning of biological resource use, the promotion of cooperation in production at the level of development of watershed and the systematic development of local economies in India.

The state governments will have to play a critical role in the creation of local markets for the absorption of multiple-cropping systems output and in the regeneration of commons to improve the availability of biological inputs production. The peoples' science movements, local self-governments and the organizations of Kisans as well as rural labour will have to come together for the use of digital solutions to help with the ecosystem health improvement. This means that the practitioners of agroecology will be required to move away from the notions of self-sufficient and autonomous farmer. Of course the greater trouble is that in the absence of favourable institutional conditions the adoption of ZBNF is going to only end up fortifying the control of the landlord capitalists over local resources. As there is also some space for the corporate capital to penetrate into input supply and product sales through the influence on the standards, certificate procedure and branding for natural farming (NF) products to be sold in national and international markets under the pathway of global integration under implementation the progressive goals of agroecology and food sovereignty can be expected to suffer further. Progressive agroecology needs systemic change and investment in the restoration of agro-ecosystems health at the landscape level in the Indian case.