Report

National workshop on Evolving Support Systems for Bio-Input Resource Center (BRC)

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At the National Institute of plant health management (NIPHM)

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Pradan(Jharkhand), KFFDT, College of Agriculture, Kalaburagi, RRA Network, Gravis, CSA, Rainmatter Foundation, RangDe, ICC, for participating in the workshop.

**Agenda of the event**

- Cross-sharing of the pros and cons, flaws in the existing BRC design, identifying gaps, success stories, the scope for innovation etc.
- Evolve a framework of support services that are essential to strengthen BRCs across the country.

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**Background**

The preparation and availability of bio-inputs, which is an alternate option for synthetic chemical pesticides and fertilisers have been a roadblock in the journey to elevate natural farming in India. The knowledge-intensive procedure, lower shelf life, storage constraints, and availability of raw materials were some of the hurdles while dealing with bio-inputs.

NCNF has been working actively in the field to coordinate training sessions for organisations, field-level functionaries, and farmers on the production and marketing of bio inputs. The aim of the training was to open a one-stop centre for farmers to avail of ready-to-use bio-inputs in required quantities along with raw materials and knowledge in natural farming.

Till now associating with various organisations like WASSAN, RRA-Network, SRIJAN, Gujarat Organic Agriculture University and GGVS, we have hosted 8 BRC training sessions. We trained 272 individuals from 7 states of the nation and opened up 40 BRC units.
Inauguration

National Institute of Plant Health Management (NIPHM) hosted the event on its campus at Himayat Sagar, Rajendra Nagar, Hyderabad.

NIPHM DG- Dr Sagar Hanuman Singh, was the Special Guest for the workshop, he inaugurated the workshop and addressed the participants on the importance of moving towards 'natural and regenerative agriculture, he gave special emphasis on the need to 'ensure the quality of bio-inputs prepared and supplied by the BRC enterprises' and how such centres can play a vital role in the transition towards Natural Farming by sharing the example of recent work done in the state of Tamil Nadu.

Dr Alice Sujeetha Director of Plant health management later explained the possibilities in the area of bio-inputs and how the NIPHM plant health department has been working on the same. Later D.Balaraju scientist KVK-Yagatipalli, Jayesh Lalka KFFDT Gujarat representing the technical agencies and organisations respectively addressed the gathering.
With the inauguration preceded the release of the “Technical Manual for Bio-Input Resource centres”. The manual is a compilation of various endemic knowledge, regarding the preparation of bio-inputs and unit installation details and was submitted by D.Balaraju (scientist KVK-Yagantipalli) and A.Ravindra (WASSAN) to the Director General of NIPHM Dr Sagar Hanuman Singh. Mrs Lalitha a BRC entrepreneur from Madhya Pradesh became the first one to receive a copy.

Part 1
Understanding the process of running a BRC - Sharing by practitioners

In this session, all the participating organisations (field level functionary of a CSO/NGO + 2 BRC entrepreneurs) were requested to prepare a presentation with the following information regarding their motivation for initiating a BRC, characteristics, opportunities, and challenges. The presentations were analysed by a panel of experts.
The team explained which all were the opportunities that they used to pitch in the idea of BRC and how was the idea welcomed, way they instituted a hierarchy of organisations and support system to initiate a BRC. The entrepreneurs shared their interests and challenges in running the unit.

Following are some of the key features that the organisations shared regarding each of their BRCs

- 242 BRC units were initiated by the 14 organisation alone that caters to at least 8500 farmers
- Wider dissemination of the recorded videos of champion farmers in the network for extension activities
- Including soil testing facility at BRC to attract more farmers
- Formation of clusters for the usage of Bio-Inputs to eliminate contamination from nearby conventional fields
- Priority is given to inputs that are having high demand in a particular locality of BRC like Sivansh Khat, Micro BX (for Soil fertility) BXP protection (Plant protection &
growth) Bhu Shakti (Mixture of Micronutrients for Soil health & to improve Soil Ph), Soya tonic & Pati tonic, Kodo & Kutki, Soyatonic, fish tonic, Neemboli, Gadurkhat

- Weekly/ Monthly meetings to evaluate the performance of BRCs.
- The idea of Multiplication & Marketing of mother culture, at the BRC centre
- Assigned a common name to BRC for better understanding and branding possibilities
- BRC members are also known as Master trainers
- Among the investment model shared by organisations, the entrepreneur is a member of an SHG and the organisation bears 30% of the cost and the rest by the entrepreneur was one among the interesting model.

Some of the major challenges portrayed by the organisation were

- BRC Certification is a confusing topic and it varies from state to state
- Packaging, labelling & expiry-Storage.
- No alternative for termite issues & weed management (Labour-intensive).
- Insufficiency of bio-inoculants to address all the pests & diseases.
- Lack of encouragement by Govt
- Migration of potential farmers and youngsters
- Farmers losing desi/non-desi livestock
- Difficulty to maintain uniform quality of bio-inputs
- Unavailability/Limited availability of Bio-innouculate at right time.
- Requires an updated marketing and business model
- Unavailability of raw materials
- Chemical addiction of farmers

The panel facilitated the discussion on the key features shared by an organisation to bring out fruitful information and suggestions

- The requirement for proper knowledge transition
- A possible technical support system to solve the tech need and raw material availability
- Possibilities for proper governing structure and ownership along with a compatible business model.

**Part -2**

**Understanding Technical Aspects related to BRCs and Group work**
After the day 1 discussion of attaining vital information from the participants, the group moved for the technical support system experts to provide their inputs on the second day.

Support agencies explained how their institution is related to the field of BRC and ways they can support the organisation to move forward with the unit. Also, they were able to provide a mini strategy on how their resources and facility can be utilised to cater for the challenges and targets of BRC units.

Mr. D. Balaraju representative from KVK Yagantipalli and key resource person for the NCNF BRC training session provided the knowledge of the major works carried out by them on BRC -
- Along with WASSAN under the APDMP project, in 2018 they initiated 120 BRC units in different parts of Andhra
- Main idea: preparation & application of bio-inoculant (seedling dipping, incubating everything (On field demonstration))
- Whatsapp groups were created among the farmers for better communication, which in turn transformed into an online plant disease consultation platform
- Entrepreneur selection was one of the major challenges faced.

Dr. Rajashekhar Basanayak representing KVK Kalaburgi shared the following experience
- Published a book which contains 82 practices that can address pest & disease management. US Darva- Book- ICR (Central govt recognised). Languages available- Kannada, English, (Hindi, Telugu & Tamil in progress)
- Book on Weeds used as food- Kannada
- Youtube channel- Krishi Manthan, for proper knowledge transformation.
- Shekru foundation one of the leading groups in Maharashtra that have done relentless work in the area of bio input knowledge transfer shared some interesting data
- Online platform- Free online video/session on NF practices to address the challenges in the native language (Marathi)
- Channel: Shekru Shetkari Shaala, Millet Jatra
- Published- 675+ virtual online free session
- Vernacular- Marathi, Hindi
- They stick to the idea that a family running a BRC unit has more success rate than a single owner-run BRC.

- The session by Dr Dhamodhar from NIPHM was very relevant to know the various facility a public-funded centre provides the farmers of the nation and he also explained various requirements expected from an entrepreneur when they are in the field of selling bio-inputs.

- After his sessions, the participants were taken for a tour through the bio fertiliser lab of NIPHM from where they could get an idea of the great extent to which they can expand their unit.

Later the session summarisation by Ravindra Adusumilli, on ways to complete the network of technical agencies and entrepreneurs. Some of the major connections for solutions are shared below.

To avoid weeds
● Parthenium (Gajar grass) - 2l Cow urine 3 kilo - Salt & add water. Stir well. Always use before flowering is a Permanent solution,
● weed in between crops: Manual practice (traditional method)
● Deep ploughing is some of the alternative traditional practices

To avoid contamination in microbial culture preparation
● Don’t use the mother culture again & again.
● While multiplication- suggested using a narrow mouth vessel to eliminate contamination.
● Also always close the mouth of the vessel & tie it properly.
● Sterilization needs to happen in a clean & enclosed area.
● Cleaned & Hygienic place where sterilization is taking place. (Personnel hygiene is also very much imp.) Not talk while transferring. Preferrable after taking shower. Mother culture has to be pure.

Regarding the availability of mother cultures Reach out to the nearest KVK to eliminate the transportation issue. If that doesn’t work, a small quantity can be sent by Dr Balaraju from AP KVK. NIPHM is also ready to support provided the CSO must follow certain procedures.

Part - 3
Design Framework of Support Services required for successfully scaling BRCs

Emerging from part 1 and 2 sharing sessions, six themes of support services were identified as mentioned below. Participants were grouped under each theme to share potential models of how these thematics can serve the BRC ecosystem. Some of the major points shared by them are also included under each of them
● Inputs, technology and product range
  - Decentralised concept to decide the products that need to be prepared
  - The must haves shall be minimum representation from soil health, plant health and pest management
  - An alternative technique of pest management like traps shall also be a part
  - Traditional seed availability will be an attractive measure to bring in more farmers to the centre
● Marketing and packaging
- Gramsabhas are the perfect areas to spread the word
- The SHG shall act as a sales representative unit for the bio-inputs
- Preparation in bulk quantities after attaining pre-booking
- In 1 Block there can be 1 BRC- different outlets can be made for better marketing. It also helps in Monitoring & Control (Like Cloud kitchen- Cloud BRC)
- Disseminating made by the Champion farmers on the ideas/practices followed in his/her field might be useful for other farmers

● Finance, funding and investment
  - The centre can be self-funded by a farmer for whom the capital income shall be provided by an agency or an FPO under minimal interest
  - The centre shall be sponsored by an organisation and later paid back from the turnover
  - The unit shall be owned by an organisation and the farmer can be shared a % of the income

● Governance
  - The unit shall be owned fully or partly by the entrepreneur
  - The centre shall be under the technical guidance of a resource agency
  - The unit shall be supported either by an FPO or an SHG

● Knowledge sharing
  - Accumulated ingredients can be collected in one place that can cater to every person. Here, technology can help in bringing that system (Ex: WASSAN, AP)
  - Needs of knowledge- preparation & application
  - Written audio and video-based information that can be shared

● Entrepreneurship
  - Focus on the season activity to cover the cost of the rest of the season (off-season.)
  - More women-centric approach for more success
  - Family-based units shall be more successful

... The groups found a variety of methods to attain excellence in the specified topic, considering the diverse experience each of the members in the group had, which made the presentation very practical.
The coordinators were assigned a task to document, analyse and make a structure of the proposed design, which shall be taken ahead for the future work of the coalition, hence organisations.

The last session of the event was kept aside for Funding/Financing Strategy for Scaling up. Vikas from Rainmatter foundation and Ram from Rangde shared their inputs after attending the complete event. They were completely aware of the need for such a movement and the immense possibility of such a micro-level enterprise, in agricultural India. The points shared by the Group handled governance was quoted by them to design the strategy for pooling funds to such centres and entrepreneurial mechanisms that can be aligned with it. Some of the major aspects they shared in the session are as follows.

- BRC centre of excellence by NCNF. Need to have a core construct using a digital platform. Create a dedicated platform for world-class content.
- Need for Market research analysis: Spending of farmers, diff stages what products are required
- Fear marketing (Message to farmers) - Human health, Soil health, impact on next generation health.
- Import planning: production & quality. Ex: Bio-enzymes, cleaners, Soap,
- Marketing analysis of these products- high. Livestock is an imp tool for that"
- Investment shall be of two types
- Infrastructure
- Soft investment (capacity building)

Conclusion

The climax of the event was through a quick round among partners in which each of them shared an input that they can take back and implement and a suggestion that the coalition can consider implementing at a broader scale. Some of them are as follows.

- Model BRC creation. Example for farmers. Will help in wider dissemination.
- Guidelines to update BRC as a dynamic model
- Technology improvement, Upgrade marketing strategy
- Improvise the Carbon content
- Division in the zone for better management in conducting meetings/support for strengthening BRCs.
- Come up with a viable sustainable sample onfield model of BRC in rainfall & rainfed areas
- Help the colation in supplying mother culture to partners"
- Create videos of 82 formulas of concoction in Hindi & send them to the BRC Whatsapp group
● Networking & reach out for scaling up BRCs

Key suggestions that emerged from the program moving ahead are:
- Online tech support system
- National Excellence centre for BRC
- Celebrating the work done by the entrepreneurs for moving ahead with BRC units

The detailed note of each of the sessions along with the schedule of the program is attached to this report for reference.

Event Notes and Schedule
Photographs