



NEWSLETTER

KRISHI VIGYAN KENDRA, THOUBAL
DEPARTMENT OF AGRICULTURE, GOVERNMENT OF MANIPUR



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April, 2015 - December, 2018

Success Story



Smt. Ibechaobi Leima, aged about 45 years from Umathel Thoubal District, has been doing organic farming since 2015 under Integrated farming system mode with the components; cattle, piggery, E.M. Composting, fishery, bamboo plantation around her farm boundary, Black rice during Kharif season and horticultural crops in her 1.50 ha land. She earns an annual income of more than Rs. 2,00,000/- though the production was a bit low in comparison to chemical agriculture. The crops and livestock residues were utilized to produce organic manures and compost along



with Effective Microorganism to enhance production period and quality. These organic manures were used for manuring the crops instead of using chemical fertilizers and other chemical pesticides. The produced blackrice grain was used to produced several by-products through food processing and value addition, such as black rice puri, laddoo, noodles, rasgulas, poha, suji etc. KVK Thoubal conferred her Best Women Farmer award in the year 2017. Recently she got the East Zone, India Women Farmer award given by the Mahindra Samradhi India with a memento and cash prize of Rs. 51,000/- in the field of Integrated farming system and value addition of black rice. Under her leadership she established a Farmers' Club through KVK Thoubal under NABARD so as to uplift the farmers of her village.



Smt. Wairokpam Ongbi Bimola Devi, aged about 58 years old is a well educated progressive and successful women farmer from Laiphrakpam Village, Thoubal District, Manipur. The village is famous for the production of vegetable crops throughout the year in the district. Every household has a vegetable farm producing vegetable crops for household consumption and sold to the Imphal market fetching good price and earning income throughout the year. She has been in touch with



KVK by conducting OFT and FLD in several crops and livestock. Thereafter she took up farming in a scientific way since 2012 with the inclusion of rice farming using SRI method for increasing production and seed production in partnership with KVK, Thoubal. The rice fallow areas were utilized for the cultivation of rabi field crops such as lentil, field pea and mustard in a cropping system mode. Apart from rice cultivation, she took up fishery, piggery, poultry, vermicomposting, mushroom cultivation and polyhouse cultivation of high value crops like chilli, tomato and cucumber in an integrated farming system. Not only working in her field for earning income she has been exposed her work through participation in many Krishi Mela organised by ICAR, Lamphepat, CAU, Imphal, KVK, Thoubal and state Krishi mela organised by SAMETI, Manipur. For her contribution in the field of agriculture and allied activities, KVK Thoubal conferred her Best Women Farmer award in the year 2017. Recently she was awarded the Best Farmer Award by the SAMETI, Manipur with a certificate and cash prize of Rs. 50,000/-. Through KVK, Thoubal under NABARD, she has established a Women Farmers' Club, Laiphrakpam.

Message from the Director



It gives me immense pleasure to know that Krishi Vigyan Kendra, Thoubal is bringing out its 2nd issue of Newsletter for the benefit of farming community. It is a noble and appreciable attempt in their part to establish a strong communication link with the clientele in the district. The newsletter serves as a strong communicative media for the KVK to project their activities to the public. It also serves as an authentic source of information to the farmers and extension personnel's at their doorsteps. Relevant information data etc, helps the farmers to get repository of useful information without running around. I congratulate the Senior Scientist and Head and her team for their initiation and wish them all success in their endeavor.

Rajendra Singh

(Ph. Rajendra Singh)
Director of Agriculture, Manipur

Scientific Advisory Committee (SAC)



11th SAC Meeting

The 11th & 12th SAC were held on 9/02/2016, and 31/01/2017 respectively with Shri Louis Ngasainao the then Director of Agriculture, Manipur as Chairman. 13th SAC was held on 10/01/2018 with Shri Ph. Rajendra Singh, Director of Agriculture, Manipur as Chairman.

Highlights of KVK Activities

(April, 2015 - December, 2018)

Activities	No.
On Farm Trial (OFT)	33
Front Line Demonstration (FLD)	48
Training	205
Method Demonstration	30
Soil Health Camp	32
Radio Talk	64
TV Talk	40
Popular Article	305
Extension Literature	36
Newspaper coverage	23

Report from the the Editor's Desk



Dear Readers,

It gives me great opportunity to present the second issue of KVK Thoubal Newsletter, the only KVK under the Department of Agriculture, Manipur. As the mandate of KVK is Technology Assessment and Demonstration for its Application and Capacity Development, this Centre has conducted regularly On-farm testing to assess the location specific agricultural technologies under various farming systems, Frontline demonstrations to establish production potential of technologies on the farmers' fields; capacity development through trainings of farmers and extension personnel to update their knowledge and skills on modern agricultural technologies and provide farm advisories using ICT. The farmers' attention, interest and the feedback are quite good and encouraging.

With the cooperation and technical support of the Scientists working in different disciplines and field staff, this Centre has been able to promote two women Entrepreneurs Smt. Mayanglambam Ibechaobi Devi of Integrated Farmers club from Kakching Khunou, Umathel achieving Mahindra Agri award for Eastern Region & Smt. Wairukpam Bimola of Womens Farmers club Liphrakpam from Laiphrakpam who have won State best Farmer at board level award. We have also been able to establish 10 Farmer Clubs with the kind support of NABARD Manipur Region and have also implemented a project on Custom Hiring Centre for farm equipments funded by NABARD.

I thank Regional Office NABARD Manipur for their kind support and all my technical & non technical staffs who have tirelessly contributed in releasing this 2nd issue.

Greetings to all the Readers.

S. Zeshmarani

(Dr. S. Zeshmarani)
Sr. Scientist & Head KVK, Thoubal.

On Farm Trials



OFT on performance evaluation of Chilli (Pusa Sadabahar)



OFT on IPM of Rice



OFT on Feeding of Azolla on milk yield of Dairy Cattle

KVK, Thoubal has conducted 33 nos. of trial for disciplines of Agronomy, Horticulture, PBG, Plant Protection, Animal science, Fisheries and Home Science at different locations of the district on proven technologies. These trials were analyzed by comparing to farmers' practice. Parameters such as yield, production, cost involved, input availability, net profit, cost-benefit ratio etc. before and after the intervention were observed.

Frontline Demonstration (FLD)



FLD on Solar Dryer



FLD on Goatery



FLD on Rice Seed Prodn.

Activities having advantage over the existing farmers' technology were chosen for large scale adoption as FLD in the district. A total of 269 demonstration have been conducted and popularized during this period. Among them most popular being hybrid rice trial, chemical castration of pig, zero tillage cultivation, relay cropping technology and integrated farming system etc.

Training Programmes



A total of 205 trainings for Farmers, Rural youth and extension functionaries were taken up on need based on various topics as mandatory work of KVK both ON and OFF campus. In addition various sponsored training program have also been organized sponsored by different Agencies viz. YVU Thoubal, American Ltd.India, NFDB, DRDA Thoubal, PPVFRA & Manipur SFAC

Sponsored Programmes



NFDB Sponsored program



Manipur SFAC Sponsored program



DRDA, Thoubal Sponsored program

Mera Gaon Mera Gaurav

Under this program training, group discussion, group meeting, & demonstrations were taken up in the adopted villages of KVK, Thoubal.



Swachhta Activities

Activities such as Compost pit making, awareness campaign around bitter sanitation, practices, hand washing, composting of waste material, school level rallies and cleanliness programs, vermicomposting were taken up under the Swachhta Program.



Swachhta activity at Khongjom



Swachhta activity at Wangjing

Method Demonstrations



Demo on feeding Mgmt.



Demo. on Seed treatment



Demo. on Soil Sample Collection

KVK, Thoubal has conducted 30 methods demonstration program on various topics at different locations of the district .

Scientist Visit to Farmers Field at different location of Thoubal



Care for Livestock

Animal Health camp & vaccination programs are carried out regularly.



Animal Health Camp



Anti Rabies Vaccination Prog.



Vaccination of poultry birds

Exposure Visit



Field Day



Field Day at Farmers field, Dr.I.Meghachandra Principal Scientist ICAR along with farmers.



Field Day cum interaction prog. at KVK



Distribution of Rabi Seeds on Field Day 2018 at KVK by Dir. Agri, Rice Breeder & Sr.Scientist & Head

Farmer Club



Launching program of Farmers Club
Deliberating By Shri M.S.Khaidem, Joint Director of Agri. Manipur.



Distribution of Farm tools to FC

Farmers' Clubs are grassroots level informal forum formed generally in the Operational Area of a Bank with the support and financial assistance of NABARD duly promoted by an Institute under the Government or NGO for the mutual benefit of the banks concerned and rural people. Farmers' Club should have minimum of 10 members, no upper limit in the membership is envisaged. Every Club would have two office bearers - One 'Chief Coordinator' and the other

'Associate Coordinator'. The office bearers would be elected by Club Members on a democratic basis for a term of two years. In line with the above theme, KVK Thoubal has promoted ten Farmers' Clubs since December 2017 viz. i) Women Farmers Club, Laiphrapkam (ii) Wabagai Oriented Farmers Club (iii) Kakching Farmers Development Club (iv) Keirak Farmers Development Club (v) Farmers Welfare Association, Wangjing (Wangkhei) (vi) Participatory Farmers Development Club, Kakching Laiphram Lotnung (vii) Lourembam Loumi Chaokhat Lup, Lourembam (viii) Integrated Farmers Club, Umathel (ix) Yokhat Farmers Club, Ukhongshang (x) Kairembikhok Farmers Club, Kairembikhok.

Under the concept of increasing Farmers Income by minimizing the production cost of Rice, Custom Hiring Service sanctioned by NABARD Manipur Centre is under implementation by the Farmers' Clubs of the District which have already benefitted around 100 farming families.



Launching program of Farmers Club Deliberating
By Shri R.K.Yaiphaba, DGM NABARD

Mini Soil Testing Lab

A mini soil testing lab has been established at KVK, Thoubal. Soil tests have been carried out in this Laboratory. Till March, 2018, 230 nos. of soil health card has been distributed.



Soil Testing at KVK Lab



Distribution of Soil Health Card

Celebration of Important Days



Fasal Bima Yojana



World Soil Day



Mahila Kisan Divas



World Fisheries Day



Sankalp Se Sidhi



World Veterinary Day

CFLD Program

Under the sponsorship of NMOOP and NFSM demo. for oilseed and pulses have been carried out by KVK, Thoubal at 14 villages adopted by 85 farmers covering 40 ha of area. For oilseed zero tillage of rapeseed in rice based cropping system have been taken up at Khonjom, Hijam Khunou, Wangjing, Sabaltongba, Kshetrileikai, Thoubal Wangmataba & Kiyam Siphai. Blackgram, Fieldpea and rice bean has been taken up for demo under pulses.



Distribution of Seed for CFLD



Field visit by Director Jute Shri Manoharan



CFLD Field

Seed Hub



Inauguration of Seed Processing Centre by Shri V. Hangkhanlian Hon'ble Minister (Agri. & Vety), in presence of Shri Letkhogin Haokip IAS, Addl. Chief Secy. (Agri) & Dr. B.C. Deka Director, ATARI and Shri Ph. Rajendro Former Director, Agriculture on 10th August 2018.

For Ensuring timely availability of sufficient quantity of quality seeds, a seed hub unit has been established at KVK, Thoubal funded by National Food Security Mission Ministry of Agriculture & Farmers Welfare Department of Agriculture, Cooperation and Farmers welfare. Demonstration for crops like Pigeon pea, Mung, Urad bean, Chickpea, Lentil and pea have been taken up at different location.



Pigeon Pea Field under Seed Hub at Serou, Sugnu.

Significant Achievement

1. **Feeding of probiotics in Broiler.** Commercially available probiotics are fed @ 2gm per litre drinking water from day old to 14 day and from 25th- 30th day of their life

Trial was conducted in 20 numbers of farmers with 5000 numbers of broiler birds the feedback from the farmers were quite good and nearby farmers were also widely adopted this technique. The performance of the bird was higher with the inclusion of probiotic and also the benefit cost is high due to increase in survivability. At first farmers were reluctant using probiotic as it is new to them and they were in a



dilemma whether mortality percentage will be high with less profit. After convincing them they have started adopting and spreading to other broiler farmers. Another advantage is that there is no risk for residual effect in the meat by adopting this technology.

2. **Culture of *Osteobrama belangeri* along with Chinese carps:-**

Osteobrama belangeri locally known as Pengba in Manipuri is the state fish of Manipur and this species was cultured in the combination of Pengba, Grass carp and Silver carp in the ratio of 40:30:30. The



technology has been adopted not only by many farmers in the Thoubal district (KVK district) but also has been spread to almost all other districts of Manipur. After the introduction of this technology many farmers are interested to culture potential endemic fishes and asked for the species diversification in aquaculture which can give better benefit for the farmers. The small and marginal farmers in particular have started to get benefit from this technology and more farmers will certainly be benefited in the near future in a sustainable manner as a source or means of their livelihood and to enhance their standard of living.

Case of Large Scale adoption



Hybrid Rice Field



Chemical Castration of Pig



Cucumber Plantation

- Hybrid Rice:-Introduction of Hybrid rice: PAC-801,PAC-807,Arise and Arise 6444(gold) and Prima has increase the income of farmers.It is spread to all the valley district of manipurDepartment of Agriculture,Manipur also distributed hybrid seeds at free of cost to the farmers through RKVY scheme.
- Zero tillage mustard cultivation & lentil with new mustard and rapeseed varieties like M-27,TS-36, TS-38,NRCHB-101,Pusa Bold & Lentil var. HUL-57 etc.Farmers are now using these varieties in zero tillage cultivation during rabi season in rice fallows.
- The introduction of Chemical castration of pig by KVK encourages the farmers to take up chemical castration instead of open method of castration as it reduces the cost of castration and injury to the piglets with a success percent of 70%.
- With the introduction of hybrids of pumpkin,bottlegourd, cucumber and watermelon by KVK,Thoubal several farmers adopted these crops in large scale in rice fallows during spring season increasing the cropping intensity in rice areas.

Participatory Rice Seed Production

Rice seed production has ben going on in the KVK farm as well as in the field of registered seed growers in a participatory mode.Rice seed prod. of HYVs namely-Akutphou, Gin phou,tampha phou ,RC Maniphou-12 and RC Maipha-13 etc at different locations Laiphrak-pam, Langmeithet, Wangjing, Uyal, Kakching Thongjao,Keirak , Tangjeng Khunou, Thoubal Wangmataba total of 15 ha . producing about 90 tonnes diring this period of three year as quality seed in order to make available quality seed to the rice growers as well as to enhance income of rice seed growers as well as quality seed growers.The seeds produced were bought back from the farmers and processed by KVK,Thoubal and were sold out to the farmers as seed material. Approx 337.15 tones of rice has been produced as seed material.



Rice Field in KVK,Farm



Seed Inspection Team at Farmers Field

Photo Gallery



Demonstration on construction of Bokashi Piggery



QPM Production Unit



Organic input production Unit



Demonstration of F1 Hybrid Maize at KVK TBL



Dr.B.C.Deka, Director ATARI with his KVK Thoubal Family.



Dr. A.K.Singha, Principal Scientist with Scientists of KVK TBL.



Celebrating Vanmahotsav at KVK Thoubal.



Dr.K.Manoharan Director Jute on Lens with Scientists of KVK Thoubal after inspecting Seed Hub.

Establishment

- Shri Khaidem Mohendra Singh, the then Joint Director of Agriculture Manipur took over the charge of Sr.Scientist & Head from the i/c Programme Coordinator Dr. M.Thoithi Singh on July,2017 and retired on 28th Feb,2018.
- Dr. Sarangthem Zeshmarani took over the charge of Senior Scientist & Head w.e.f 28/02/2018



Staffs of KVK, Thoubal

Dr. S. Zeshmarani	- Sr. Scientist & Head
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Dr. M. Thoithoi Singh-	SMS(Plant Protection)
S.Sumangal Singh	- SMS(Plant Breeding & Genetics)
N. Tomba Singh	- SMS(Agronomy)
R. K.Lembisana Devi	- SMS(Home Science)
L. Babita Devi	- Program Asst.(Computer)
W. Jiten Singh	- Farm Manager
O. Shilhenba Singh	- Assistant
M. Geeta Devi	- Steno cum Computer Operator
M. Hemanta Singh	- Driver cum Mechanic
Th. Tiken Singh	- Driver cum Mechanic
E. Dhabali Singh	- Peon cum Chowkidar
Mangminthang Zou	- Peon cum Chowkidar

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