A BOON TOWARDS BEATING THE HEAT WITH "RED STAR"

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Mr. Pradip Saikia, a small and a marginal farmer, resident of a small village in Gabharupar of Bamunpukhuri Gram Panchayat, situated under Dhekiajuli block of district Sonitpur Assam have set an example to small marginal farmers by adopting modern agricultural practices and techniques. He had cultivated watermelon, a horticultural crop in the year 2019-2020. The variety he had chosen was "Red Star" having a maturity period of 70 days. He had cultivated the crop in his 6 bighas of land in a nearby plot enriched with sandy loam soil by the 2nd week of Nov 2019 immediately after harvesting of Sali paddy. He solely have to depend upon this small piece of land to look after his family as he has no other source of income.

During the period of cropping season, he showed keen interest in attending farmer's technical training programme on "Scientific Production Technology of Watermelon conducted by CSS ATMA, delivered at the block level for adopting scientific techniques and methods gradually in watermelon which is considered as a very important technique to be followed by the farmers of Assam to obtain good crop population and ultimately higher yield. Adopting scientific agricultural techniques helps farmers to reduce the labour cost during intercultural operation and also reduce the application of pesticides and fertilizers thus benefit the farmers by reducing the cost of cultivation. His total cost of cultivation was Rs 6000 which was supported by his wife through the piggy bank.

Mr. Saikia believes in practising multi cropping system to maximize the use of his land and increase his income. He also grows crops such as potato, lentil, peas, blackgram, cole crops etc. He adopted and followed the techniques taught by the agricultural officials on "Scientific Production Technology of Watermelon to obtain a good yield and also in order to double his income through the market linked traders without any support of agricultural loans. During technical training programme, he shared his personal experience, and mentioned that while adopting this method, emphasis was mainly laid in maintaining spacing of 152.4 cm at the time of planting in order to maintain a uniform planting geometry. The seeds and inputs were provided by the Office of District Agricultural Officer, Sonitpur Assam. He used to apply recommended doses of fertilizers such as single super phosphate (4kg/bigha) and organic manure such as cowdung @ 10 quintals in 6 bighas of land to boost the production and productivity by improving the fertilizer use efficiency at the time of land preparation. The requirement of seeds was comparatively lesser (2000g/bigha) with 3 seeds each in an individual hole keeping a distance of 152.4 cm from each hole, altogether with 500 number of holes per bigha which was practised manually. An intercultural operation such as weeding and thinning was followed after 20-25 days of planting. Regular monitoring and supervision of the crop was done thoroughly by him to get rid of fruitfly and aphids which is commonly occured at the vegetative stage of growth in watermelon. Application of Malathion @1ml/l of water using hand sprayer was followed strictly for further control of fruitfly at its larval stage. Further at the flowering stage of the crop, he started rearing of honey bees which is collectively known as 'Apiculture' for pollination since it is a hybrid variety thereby leading to the increase in quality fruits production and popularisation of varietal development in watermelon.

Mr Saikia was immensely satisfied with the performance of the variety and had produced an estimated yield of 45 quintals/bigha with a total yield of approx 270 quintals in 6 bigha of land. He

sold the produce immediately until the arrival of the next cropping season at a fair price of Rs.20/ kg which generally weighed around 3-8 kg and earned a net profit of Rs.75000.00. Despite of facing some major constraints such as continuous lockdown affect since 24th March 2020 as well as artificial irrigation facilities which directly declined the market linkage channels of several farmers during the harvesting period, Mr. Pradip Saikia had produced a satisfactory yield and broke the barrier of hindering the potentiality of earning income.Due to suitable soil and climatic conditions as well as through his dedication and continuous efforts towards farming, he could be able to achieve higher yield and income within a short period of time as well as could motivate the other small and marginal farmers of his nearby village for further uplifting their economic status thereby preserving their ancestral occupation for future generations.

Name of the farmer	: Mr. Pradip Saikia
Age	: 46 years
Village	: Gabharupar
Gaon Panchayat	: Bamunpukhuri
Block	: Dhekiajuli
District	: Sonitpur, State: Assam
Contact number	: 7399910474



Fig. 1. Seedling stage of watermelon variety Red Star after 20 days of planting

Fig. 2. Stage of harvesting after 70 days of planting