Seed is the fundamental and most important input for sustainable agriculture development. It’s directly proportional to food security, without seeds we can’t presume food security for livelihood. In Palghar district, 52% tribal population live in rural areas and they are cultivated 392 thousand Ha land. Majority of the farmers are grown only rice crop as a staple food in Kharif season. BISA has promoted various improved crops varieties (short & long duration, high yielding, disease & pest resistance, heat & drought tolerance and water stress resistance) along with climate resilient techniques (DSR, Rab free nursery development, ZT-conservation agriculture techniques along with residual moisture and minimum supplementary irrigation seed born disease management by seed treatment chemical & rhizobium, weeds management by weedicide chemical, Nutrient management by NPK multi-nutrient briquettes, Zinc Sulphate fertilizer and crop diversification by promoted others crops) in Kharif and Rabi seasons. Based on climatic condition, soil, topography and land use pattern. In rainy season of Rice, Sorghum, Black gram, Maize and vegetables, total 87356 Qt seeds & chemicals distributed among in 27778 farmers, which covered approx. 150 Ha of cultivation and produced 1044 tons yield during the last three years. In post rainy season, most of the farmers were denied to take any crops due to irrigation, seed availability, technologies & agronomic practices; BISA set of sustainable interventions mitigate these problems by introduced improved Rabi crops seed varieties of Wheat, Chickpea, Mustard, Pigeon pea, Dolichos and Maize with climate smart agriculture techniques. During the previous years of 2016 to 2019, total 89943 Qt seeds were distributed among the 17923 farmers that cultivated in approx. 130 Ha of lands and produced 1075 Tons of food grain.

BISA intension behind the quality OP (open pollinated) seeds F-1 type distribution with Hermetic technology (multi-layer, pesticide free & organic) for seeds bank accessions to the poor tribal farmers; And its impact on increased total biomass production, high grain yield, increased harvest index (HI) and seed security for next year. The farmers were very happy with the simplicity of the technology, surplus production with socio-economic empowerment.

Mr. Devidas Vishnu Chaure (Male, 33 Y, Village- Pochade, block- Vikramgad, Palghar district) is CSV progressive farmer and associated with BISA from 2017, he belongs under ST category. In Kharif- 2019, he was successfully cultivated rice crop in 0.40 Ha of land and produced 9.0 Qt. of food grains and straws for his livestock, he was highly excited with the success of high paddy production and earned income. Similarly, Mr. Parshuram Bhau Jadhav (M, 45 Y, Village- Aalyachimet, block- Jawhar, district- Palghar) is grown wheat crop in Rabi- 2017 in 0.12 Ha of lands and produced 1.0 Qt wheat grain. He also belongs to ST tribal category and actively associated with BISA under the project “climate smart village programme” from 2016 and now he realized happiness and shared word-of-mouth thanks to Borlaug Institute for South Asia (BISA) and the Department of Tribal Development, Govt. of Maharashtra.

About BISA: The Borlaug Institute for South Asia (BISA) (www.bisa.org) is a non-profit international research institute dedicated to food, nutrition, and livelihood security as well as environmental rehabilitation in South Asia. BISA is a collaborative effort involving CIMMYT and the Indian Council for Agricultural Research (ICAR).