Report of the Joint Inspection Team (JIT) under leadership of Shri R.K. Chawla, Section Officer, Mission for Integrated Development of Horticulture (MIDH), on its visit to Jharkhand during 24-28 September, 2018 to review the progress under National Horticulture Mission (NHM) – sub scheme of Mission for Integrated Development of Horticulture (MIDH).

The Joint Inspection Team (JIT) headed by Shri R.K. Chawla, Section Officer alongwith Shri Pankaj Sharma, Senior Technical Assistant and Shri P. S. Kohli, Resource Person, Mission for Integrated Development of Horticulture (MIDH) visited Jharkhand during 24-28 September, 2018 to review the progress under National Horticulture Mission (NHM)- sub scheme of MIDH in the state. Representatives from Precision Farming Development Centres (PFDC), Ranchi, though informed in advance, could not coordinate with JIT owing to their pre-engagements. A wrap up meeting was held with Shri Vijay Kumar, Mission Director of SHM at Ranchi on 27th September, 2018.

Horticulture at Glance in Jharkhand

- Jharkhand is producing 45.50 lakh MT of horticulture crops from an area of 4.05 lakh ha.
- State contributes about 2% of horticulture production to total production of horticulture crops of the country.
- State occupies Sixth place in production of Green chillies and contributes about 7% to the total production of green chillies in the country.
- State occupies Ninth place in production of Cabbage and contributes about 4% to the total production of cabbage in the country.
- State occupies Tenth place in production of Papaya and contributes about 2% to the total production of papaya in the country.

Interventions of Mission for Integrated Development of Horticulture (MIDH) in Jharkhand

The Centrally Sponsored Scheme of National Horticulture Mission (NHM) is being implemented in Jharkhand since 2005-06. From April, 2014 onwards, NHM has been subsumed under Mission for Integrated Development of Horticulture (MIDH) for holistic growth of the horticulture sector covering fruits, vegetables, root and tuber crops, mushrooms, spices, flowers, aromatic plants and plantation crops

Implementation of National Horticulture Mission (NHM) in Jharkhand

Districts Covered: Palamau, Chatra, Latehar, Dumka, Deoghar, Ranchi, Lohardaga, Hazaribagh, Saraikela, East Singhbhum, Gumla, Jamtara, Pakur, West Singhbhum, Ramgarh, Khunti and Simdega.

Focus crops identified: Aonla, Litchi, Mango, Peach, Citrus, Papaya, Ginger, Turmeric, Chillies, Flowers and Medicinal & Aromatic Plants.

Objective of JIT visit:

Apart from reviewing the progress of NHM activities in the State of Jharkhand JIT team was also directed to look into the issues related to unspent balance and other financial matters of the State as Jharkhand has reported a liability of Rs. 1956.91 Lakhs (GoI + State share) for the FY 2015-16 & 2016-17. On the first day of field visit Shri Vijay Kumar, Mission Director also visited along with JIT to Jamshedpur district to see the project on rest of the days JIT visited the field along with representation of the SHM. JIT team was directed to verify the actual status of these projects/programmes. Accordingly, JIT team along with the SHM representatives has visited mainly the projects/programmes approved and pending for payment for the year 2015-16 & 2016-17. Details of the projects visited are as under:

Project/Activity No. 1: Tissue Culture Unit (Private Sector)

- Name of Beneficiary: Sashanka Agro Tech Pvt. Limited
- Location of the Project: Balu, Kanke, Ranchi
- Year of Implementation: 2017-18
- Name of the Component: Tissue Culture Unit
- Project Cost: Rs. 3.20 crore
- Eligible for Subsidy: Rs. 1.00 crore.
- Total Capacity: 25 lakh to 35 lakh plants of Banana, Gerbera and Bamboo per year
- Observation: Construction work in progress, likely to be completed by December, 2018.
 Subsidy has not been released so far.

Project/Activity No. 2: Technology Dissemination through Demonstration/Front Line Demonstration:

- (a) Soilless Strawberry Cultivation
- (b) Colour Capsicum Cultivation
- Name of Beneficiary: Horticulture Farm (Public Sector)
- Location of the Project: Ratu, Ranchi
- Year of Implementation: 2016-17
- Name of the Component: Frontline Demonstration (FLD)
- Project Cost: Rs. 50.00 Lakhs (Rs. 25.00 Lakhs each unit)
- Subsidy component: Rs. 50.00 lakh
- Activity: Demonstration of Soilless cultivation of Strawberry & Colour Capsicum under protected cover
- Observation: Logo of MIDH was not displayed at the time of visit FLD was made operational in April. 2018. Record of demonstrations was not maintained. FLD may cover FPOs/FIGs/farmers/Entrepreneur

Project/Activity No. 3: Mushroom, Spawn and Compost making Unit (Private Sector)

- Name of Beneficiary: M/s Mushroom Tub
- Location of the Project: BIT, Mesra, Ranchi
- Year of Implementation: 2016-17
- Name of the Component: Integrated Project Mushroom, Spawn and Compost Production Unit
- Project Cost: Rs. 55.00 Lakhs
- Subsidy component: Rs. 22.00 lakh
- Observations: Operational with production of about 350 Kg of Button mushroom per day and seasonal production of 35 ton of compost. Inspection of the unit has been completed.
 Payment of Subsidy to the beneficiary is under process. Logo of MIDH displayed.

Project/Activity No. 4: Protected Cultivation

- Name of Beneficiary: Shri Vikas Kumar
- Location of the Project: Dube , Ranchi
- Year of Implementation: 2017-18
- Name of Component: Protected Cultivation Green House

- Project Cost: Rs. 45.00 lakh
- Subsidy component: Rs. 22.00 lakh
- Size of Structure: 3000 Sq. Mtr. (3 structures of 1000 sq. Mtr. Each)
- Crops being grown: Red Roses, White Roses and Gerbera
- No. of Plants: 10,000 Planting material procured from HAKA, Hyderabad
- Observations: Maintenance of Green House and plant health of Red Roses was good.
 Green Houses for White roses and Gerbera were well maintained but the infestation like
 thrips and mite and curling of leaves were observed. IPM measures needed. Logo of
 MIDH was not displayed. No double door entry to Green Houses. Subsidy yet to be
 released.

Project/Activity No. 5: Small Nursery (Private sector)

- Name of Beneficiary: Shri Rajesh Kumar,
- Location of the Project: Ranchi.
- Year of Implementation: 2015-16
- Name of the Component: Small Nursery
- Project Cost: Rs. 15.00 Lakhs
- Subsidy component: Rs. 7.50 lakhs
- Area: One hectare
- Crops grown (Variety): Mango (Amrapali, Dusheri, Langra), Lemon (Kagzi), Guava (Sardar I-49), Pomegranate (Bhagva)
- Observation: Inspection report by Bank will be completed by November/December, 2018. Therefore, payment of subsidy has been delayed.

Project/Activity No. 6: Ripening Chamber

- Name of Beneficiary: Shri Naushad Ali
- Location of the Project: Jamshedpur
- Year of Implementation: 2015-16
- Name of the Component: Ripening Chamber
- Capacity: 40 MT (4 Chambers of 10MT each)
- Commodity: Banana (Ethylene ripening)
- Project Cost: Rs. 40.00 lakh
- Subsidy availed: Rs. 12.50 lakh for 25 MT
- Observation: Subsidy disbursed. Banana procured from West Bengal for ripening. Logo of MIDH not displayed.

Project/Activity No. 7: Protected Cultivation

- Name of the Beneficiary: Shri Paradip Kumar Mahato
- Location of the Project: East Singhbhum, Jamshedpur
- Year of Implementation: 2015-16
- Name of Component: Protected Cultivation Green House
- Project Cost: Rs. 17.32 lakh
- Subsidy component: Rs. 6.80 lakh
- Size of Structure: 1000 Sq. Mtr.
- Crops grown: Red Roses planting material procured from Pune, Maharashtra.

• Observation: Subsidy is yet to be paid and under process. Plants infested with thrips therefore, IPM measures required. Maintenance of Green House is poor, weeding and pruning required. No double door entry to Green House. Logo of MIDH displayed.

Project/Activity No. 8: Protected Cultivation

• Name of the Beneficiary: Mrs. Gita Rani Mahato

• Location of the Project: East Singhbhum, Jamshedpur

Year of Implementation: 2015-16

• Name of the Component: Protected Cultivation – Green House

• Project Cost: Rs. 17.32 lakh

Subsidy component: Rs. 6.80 lakh

Size of Structure: 1000 Sq. Mtr.

• Crops grown: Red Roses – planting material procured from Pune, Maharashtra.

• Observation: Subsidy is yet to be paid and is under process. Plants infested with thrips therefore, IPM measures required. Maintenance of Green House is poor, weeding and pruning required. No double door entry to Green House. Logo of MIDH displayed.

Project/Activity No. 9: Cashew Plantation

Name of the Beneficiary: Shri Yadunath & 25 other farmers,

Location of the Project: Rautara, Jamshedpur

Year of Implementation: 2016-17

Name of the Component: Area Expansion of Cashew

Total Area: 70 Hectares

• Observations: Subsidy given in kind. Saplings procured from Shakti Nursery, Odisha, accredited by DCCD. Poor maintenance of farms resulting to curling of leaves, infested with thrips and mites. Mortality of 5% of plants has been replaced by gap filling (new plants).

Project/Activity No. 10: Ripening Chamber

Name of Beneficiary: Shri Naresh Kumar Agarwal

• Location of the Project: Hazaribagh

• Year of Implementation: 2017-18

• Name of the Component: Ripening Chamber

Capacity – 96 MT (4 Chambers of 24MT each)

Commodity: Banana, Mango, Papaya, Tamarind

• Project Cost: Rs. 96.00 lakh

• Eligible Subsidy: Rs. 33.60 lakh

• Observation: Ripening Chamber was not operational at the time of visit of JIT due to defective stabilizer and assured that it will be made operational within 20 days. Subsidy amounting to Rs. 10.00 lakh is due and yet to be paid. Logo of NHM was displayed at site.

Visit to Precision Farming Development Centre (PFDC), Ranchi

JIT also visited Precision Farming Development Centre (PFDC) on 28th September, 2018, established at Birsa Agriculture University, Ranchi. The mandate of PFDC is promote horticulture development in the state through Plasticulture application in a regionally differentiated for proper

refinement of technology and extension as per local needs across the state with the objectives to undertake trials and demonstrations on plasticulture applications for crop specific technologies.

JIT had a meeting with Er. Minto Job, Principal Investigator, PFDC in the presence of Shri Vijay Kumar, Mission Director, MIDH. During the discussion, emphasis was laid on coordination between PFDC and MIDH with regard to training and infrastructures of Protected Cultivation. It was also mentioned that PFDC has to provide technical support to state and the inputs/issues of SHM have to be discussed with NCPAH by PFDC on regular intervals.

Observations on PFDC:

- For dissemination of technology through live demonstration at PFDC, PFDC has to construct various models of Green Houses and Shade Nets in its vicinity. At present, no such models have been erected.
- PFDC may be associated with skill development programme.
- Logo displayed needs corrections as the funds for PFDC is released by MIDH not by NCPAH and State is releasing funds to PFDC.
- PFDC requested for release of funds for the current financial year 2018-19.

Meeting with Mission Director of Jharkhand on 27th September, 2018

A wrap-up meeting of Joint Inspection Team (JIT) of MIDH with Mission Director of Jharkhand was held at Ranchi on 28th September, 2018. The highlights of the discussions are:

- Mission Director pointed out that no fund was released to SHM for the year 2018-19 for implementation of MIDH activities in the State. However, funds amounting to Rs. 17.56 crore of 2017-18 have been revalidated for the purpose. Therefore, physical and financial progress for 2018-19 has not been uploaded on website. Mission Director further requested that funds amounting to Rs. 4.92 crore (GoI + State Share) towards liability for the year 2014-15 and 2015-16 may also be revalidated at the earliest for release of pending subsidy.
- SHM pointed out that the process in respect of Audit of 2017-18 is being taken up with the auditors and is likely to be completed by December, 2018.
- It was emphasised that unspent funds available under TSP may be utilized effectively.
- Mission Director, SHM pointed out that NGOs associated with implementation of MIDH programme have been replaced by Farmers Groups/individual farms/beneficiaries at District level.
- SHM mentioned that there is no permanent staff at Headquarter, District and field level in the State for implementation of MIDH programme.
- Empanelment of fabricators for activities of Protected Cultivation i.e. construction of green houses and shade net house etc. as per approved specifications is under process.
- It was mentioned that there is a lack of entrepreneurs for taking up activities of Post Harvest Management and Market infrastructures.

- SHM stated that, HORTNET is not operational in the state due to staff crunch at District level.
 SHM mentioned that efforts are being made for effective implementation of MIDH in Left Wing Extremism affected Districts of the State.
- SHM was requested to furnish success stories and crop clusters of the State.
- It was informed that a third party evaluation Study of MIDH was conducted in Jharkhand, 2014-15 by GRES – India, Srikakulam, Andhra Pradesh. Main observation are Annexed.

Observations/Suggestions of Joint Inspection Team (JIT) and Action Points

- JIT felt that Shri Vijay Kumar, the present Mission Director is endeavoring for implementation of the scheme effectively and hope that horticultural activities will make further progress under his charge.
- Lack of adequate manpower is the main constraint in effective implementation of NHM scheme in the state. Although NHM scheme is under operation since 2005-06 but no effective steps seems to have been taken by the State Government to deploy adequate manpower at state headquarter as well as at the field level. However, SHM can initiate for hiring staff/experts/specialists under Mission Management/Technical support Group at state level for monitoring & implementing the schemes as per operational guidelines of MIDH.
- SHM has not uploaded progress for the year 2018-19 on website as funds during the current financial year have not been released for implementation of MIDH activities in the state. It was communicated to SHM that funds amounting to Rs. 17.56 crore revalidated in 2018-19 can be utilized for spill over activities of 2017-18 as well as for implementation of activities during 2018-19.
- It has been observed that concentrated efforts made by SHM have enabled to introduce non-traditional crops like cashew under area expansion component of MIDH. Cashew plantation is in progress in various regions of the State.
- It is encouraging that mushroom production and beekeeping activities is being promoted in the state by SHM.
- Farmers groups/Individual beneficiaries are being encouraged at district level in the state for
 various horticultural activities including establishment of new gardens, greenhouse, mushroom
 cultivation, ripening chamber etc. DHOs need to be involved in planning and supervision of
 these activities. Training along with expertise to FPO/Farmers for plantation and up keep crops
 is essential for better results.
- Funds earmarked for TSP should be utilized in full.
- Green Houses visited by JIT at Ranchi were not well maintained as the crop was infested with thrips and mites. Therefore, it is necessary that beneficiaries of Protected Cultivation activities should be provided with training in IPM measures with requisite technical knowledge on protected cultivation as farmers lack awareness on disease and insects. In addition to this the SHM and the concerned company constructing the green house should follow all the relevant guidelines.

- Cashew plantation cluster at Rautara village, East Singhbhum need special attention as the plants are infested with thrips and mites. Farmers need training in maintenance of cashew plantation including IPM measures.
- PFDC, Ranchi should focus on dissemination of technology through live demonstration at PFDC, PFDC has to construct various models of Green Houses and Shade Nets in its vicinity as per the mandate of PFDCs. Coordination between PFDC and SHM for training programmes under Protected Cultivation is solicited. PFDC may be associated with skill development programme relating to horticultural activities.
- Subsidy amount may be released to the beneficiaries immediately wherein the inspection report and other formalities are completed.
- MIDH logo at the sites of the beneficiaries should be displayed prominently.

Photographs of the Projects Visited:





Project/Activity No. 1

Project/Activity No. 2





Project/Activity No. 3

Project/Activity No. 4



Project/Activity No. 5





Project/Activity No. 7



Project/Activity No. 8



Project/Activity No. 9



Project/Activity No. 9

Third Party Evaluation Study of MIDH in Jharkhand, 2014-15 by GRES – India, Srikakulam, Andhra Pradesh

Main Observations:

- SHM needs to ensure timely supply of disease free variety wise and adequate quality planting material properly tagged and packed to NGOs for plantation.
- Farmers may be involved in maintenance of orchards.
- SHM does not have permanent staff under MIDH for monitoring and implementation of the programme. NGOs do not have requisite technical knowledge on protected cultivation practices Involvement of technical personnel is necessary.
- Lack of awareness among farmers on disease and insects.
- To encourage vegetable seed production and mushroom cultivation.
- Cashew nut processing units need to be established.
- Establishment of Hi-tech nurseries in the state.
- Gap filling of plants in case of mortality.
- Expansion of Post Harvest Management activities.
- There is improvement in production of loose and cut flowers through protected cultivation.
- MIDH intervention resulted in the increasing area, production and productivity of Horticulture crops.