

Ecosystem Services Improvement Program

Training program on

System of Rice Intensification (SRI): SLEM Best Practices

for the farmers of Marwahi Forest Division, Chhattisgarh

2 July 2019

Venue: Krishi Vigyan Kendra, Bilaspur (Chhattisgarh)



Organized by:

Indian Council of Forestry Research and Education, Dehradun

&

Krishi Vigyan Kendra, Bilaspur

Indira Gandhi Krishi Vishwavidyalaya, Raipur (C.G.)

**System of Rice Intensification training for the farmers of Marwahi
Forest Division, Chhattisgarh
Training Report**

1. Venue of the Training: Krishi Vigyan Kendra, Bilaspur
2. Title of the training programme: “System of Rice Intensification”
3. Duration and period of the training programme: 2nd July 2019, One Day
4. Number of Participants: 27 (20 Male and 7 Female)
5. General observations:

i. Course Objectives: To build the capacity of the farmers on System of Rice Intensification (SRI): SLEM Best Practices.

ii. Training Kits: Training materials were provided in the form of printed multi-colour small calendar, notebook, brochures and fliers. High yield variety seeds and organic manure were also provided to the participants.

iii. Resource Persons: The training programme was organized in KVK Bilaspur. Highly experienced subject matter specialist gives information on different topics i.e. System of Rice Intensification technique, organic farming, control of disease and weed, use of organic manure and importance of water and Land management. engineering etc. List of the faculty is enclosed as Annexure II.

iv. Training Methodology: Training methodology includes class room lectures with audio visual aid, experience sharing, group discussion, case studies and visit to demo fields inside the campus of KVK, Bilaspur.

v. Visit/ Exposure: Visit of Vermicompost unit, Orchard, Gaushala and demo agriculture fields were arranged inside the campus. Participants got experience of new technique and methodology in Agriculture, Horticulture and Forestry.

5. The farmers/ participants have shown keen interest on all the topics of the training programme as this training programme was new for all of the participants. All the participants actively participated in all the sessions of the training programme. List of the participants is enclosed as Annexure III.
6. Interactive session was arranged with participants to solve their queries and to get feedback. This is consisting of:
 - i. Participants suggested that the duration and frequency of the training programme should be increased, case studies and hands on practices on SRI should be added in the future training programme.

ii. Most of the participants suggested following for future trainings:

- Village level training
- Participation of Van Samities
- Field level demonstration
- Techniques of Water Conservation
- Arrange training with allied department

Summary of the feedback is enclosed as an Annexure VI

7. **Way Forward:** This training programme has sensitized 27 farmers including Sarpanch, Van Samiti Adyaksh and direct beneficiaries. Participants showed determination in incorporating the knowledge gained from this training programme in their respective fields. They also showed their commitment to spread these technologies to others. It was felt that there is need to generate more awareness among farmers on SLEM Best Practices.

ANNEXURE- I**Schedule of Training Programme on
System of Rice Intensification (02 July 2019)**

S.No.	Time	Topics	Scientist Name
1	10.30 am- 11.00 am	Inaugural session	1. Dr. R.K.S. Tiwari, Dean Agriculture College, Bilaspur 2. Dr. Vikas Vatsa, Consultant ESIP-ICFRE 3. Dr. S. Biswas, Scientist TFRI 4. Dr. Amit Shukla, Head KVK Bilaspur
2	11.00 am-11.45 am	SRI technique	Ms. Shilpa Kaushik, Subject Matter Specialist Agronomy
3	11.45 am-12.30 pm	Organic farming	Dr. Amit Shukla, Subject Matter Specialist Horticulture
4	12.30 pm -01.15 pm	Weed control in Paddy	Sh. Jayant Kr. Sahu, Subject Matter Specialist Plant Pathology
5	01.15 pm-2.00 pm	Tools and instruments used in SRI	Sh. Pankaj Minj, Subject matter Specialist Agricultural Processing & Food Engineering
6	02.00 pm-02.30 pm	Lunch Break	
7	02.30 pm-03.30 pm	Field Visit	Ms. Shilpa Kaushik

ANNEXURE-II

List of the Faculty
One day Training program on System of Rice Intensification (SRI)
2nd July 2019

S. No.	Name and Address of Faculty	Designation & Specialization	Contact No.
1.	Smt Shilpa Kaushik, KVK Bilaspur	Subject Matter Specialist, Agronomy	91-7970002948
2.	Dr. Amit Shukla, KVK Bilaspur	Sr. Scientist and Head, Horticulture	91-7999606408
3.	Sh. Jayant Kumar Sahu, KVK Bilaspur	Subject Matter Specialist, Plant Pathology	91-8871271884
4.	Sh. Pankaj Minj, KVK Bilaspur	Subject Matter Specialist, Agricultural Processing & Food Engineering	07752-255024

ANNEXURE III**List of Participants
Training on System of Rice Intensification (SRI) 2nd July 2019**

S. No.	Name	Address	Designation	Phone No
1	Khemchand Sumer	Matiadand	Farmer	8959316574
2	Dhaneshwar Das	Madai	Farmer	8959666042
3	Amol Singh	Madai	Farmer	8889444719
4	Kamal Singh	Amaratikra	Farmer	8518015061
5	Jai Singh	Danikundi	Farmer & Van Samiti Adyaksh	9752014902
6	Thakur Prasad	Matiadand	Farmer	6263236812
7	Ram Garib	Matiadand	Farmer & Van Samiti Adyaksh	9669328770
8	Samay Lal	Mohri	Farmer	7354172295
9	Sher bahadur	Amaratikra	Farmer	
10	Manohar Marabi	Rumga	Farmer	9131181083
11	PushpRaj	Kolbira	Farmer & Van Samiti Adyaksh	9977289733
12	Bhawan Singh	Rumga	Farmer	6267075012
13	Mitholal	Bansital	Farmer	
14	Khelan Singh	Bansital	Farmer	
15	Santosh Singh	Bansital	Farmer	
16	Chain Singh Sarota	Bansital	Farmer	7773030971
17	RoopSingh	Rumga	Farmer & Van Samiti Adyaksh	6269652166
18	Deep Kumari Oowati	Bansital	Farmer	
19	Kamlabai Bantan	Matiadand	Sarpanch	
20	Ushabai	Bansital	Sarpanch	7773030971
21	Budhwaria Marawi	Madai	Sarpanch	9617648367
22	Sushila Shyam	Rumga	Farmer	8959650087
23	Lakha Portay	Madai	Farmer	6261693638
24	Kunti Devi	Madai	Farmer	7692814998
25	Suresh Kumar	Rumga	Farmer	8889410927
26	Suraj Kumar Sumer	Matiadand	Farmer	700321352
27	Ramsingh	Amaratikra	Farmer	7440276304

Minutes of Training Program

Indian Council of Forestry Research and Education (ICFRE) is one of the project implementing agencies of World Bank funded project 'Ecosystem Services Improvement Program' in the selected landscapes of Madhya Pradesh and Chhattisgarh. For upscaling of SLEM best practices. ICFRE selected 5 field level demonstration (1 Acre each) on System of Rice Intensification (SRI) at Marwahi region (Chhattisgarh) of project area in a pilot phase. In this connection ICFRE had organized a one-day training program for farmers of Marwahi Forest Division of Bilaspur district at Krishi Vigyan Kendra (KVK) Bilaspur (Chhattisgarh). 27 farmers including 5 direct beneficiaries of 7 villages actively participated in the program.

Training Program was inaugurated by Dr. R.K.S Tiwari, Dean, Krishi Vishwavidyalaya, Bilaspur. In his inaugural speech he said that due to climate change new era is very much challenging for famers. They have to adopt and implement new methodology and techniques to minimize the effect of climate change. He ensured that the ICAR institutes will provide full supports to ICFRE in implementing ESIP in CG.

Dr. Amit Shukla, Head & Senior Scientist, KVK Bilaspur welcomed all participants and delegates. He gave information about the activities of KVK Bilaspur. He emphasized how Agro-Horti-Forestry system would help farmers to double their income. He also explained methods and benefits of organic farming.

Dr. S. Biswas , Scientist, TFRI, Jabalpur addressed participants and told about importance of land management and water conservation in the changing scenario of climate change. He gave examples of traditional techniques used to conserve water, forest and land (Jal, Jungle, Jameen).

Dr. Vikas Vatsa, Consultant ESIP-ICFRE described the activities of ESIP project and role of ICFRE in its implementation. He explained SLEM Best practices and their benefits on society. He also thanked KVK for their interest and cooperation for ESIP project in the region.

Training session on System of Rice Intensification (SRI) was lead by Dr. Shilpa Kaushik, Subject Matter Specialist, KVK Bilaspur. In her Audio Video presentation, she explained SRI very meticulously. An Interactive session with farmers cleared their doubts and queries. Dr. Jayant Sahu, Subject Matter Specialist, KVK Bilaspur gave information about weed control and disease control in crops. He told about seed treatment and use of biopesticides in crop for high productivity. Dr. Pankaj Minj, Subject Matter Specialist, KVK Bilaspur demonstrated the new light and cheap instruments used in agriculture. He explained the importance of conoweeder in SRI technique.

Field visit of demo plots developed by KVK Bilaspur was arranged to show the farmers real world examples of crops. Vermicompost unit, Orchard, Agriculture field of crops and vegetables were explained by Dr. Amit Shukla.

Sh. Pranab Dhar, Technical Officer, TFRI Jabalpur proposed formal vote of thanks to all delegates and participants for successful organization of the training program.

Glimpse of Training Programme



Media Coverage

कृषि विज्ञान केंद्र में...एक दिवसीय श्री विधि से धान उत्पादन तकनीक प्रशिक्षण कार्यक्रम का आयोजन ...40 किसानों ने लिया प्रशिक्षण में हिस्सा।



03 Jul, 2019 Views: 124

खासखबर छत्तीसगढ़ बिलासपुर- कृषि विज्ञान केन्द्र, बिलासपुर में विश्व बैंक एवं भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद, देहरादून की पारिस्थितिकी तंत्र सुधार परियोजना के तहत श्री विधि द्वारा धान उत्पादन तकनीक पर मरवाही विकासखंड के 40 किसानों को एक दिवसीय प्रशिक्षण दिया गया।

कृषि विज्ञान केन्द्र बिलासपुर में सत्र 2019-20 हेतु भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद, देहरादून की विश्व बैंक की सहायता से चलने वाले पारिस्थितिकी तंत्र सुधार परियोजना के तहत जिले के मरवाही विकासखंड के 4 गांवों में 5 एकड़ क्षेत्र पर श्री विधि के द्वारा धान उत्पादन तकनीक पर किसानों के खेतों में अग्रिम पंक्ति प्रदर्शन कार्यक्रम हेतु परियोजना चलाई जा रही है। इसी के तहत यह प्रशिक्षण कार्यक्रम आयोजित किया गया था।

प्रशिक्षण कार्यक्रम के मुख्य अतिथि डॉ. आर.के.एस. तिवारी, अधिष्ठाता, कृषि महाविद्यालय बिलासपुर थे। उन्होंने अपने उद्बोधन में कहा कि किसान आज के बदलते जलवायु को ध्यान में रखकर प्राकृतिक रूप से उपलब्ध संसाधनों का प्रयोग करते हुए खेती करें जिससे कि वातावरण संरक्षित रहे एवं आने वाली पीढ़ी को जल संकट का कष्ट नहीं उठाना पड़ेगा।

इस अवसर पर कृषि विज्ञान केन्द्र, बिलासपुर के वरिष्ठ वैज्ञानिक डॉ. अमित शुक्ला ने अपने उद्बोधन में कृषि विज्ञान केन्द्र बिलासपुर की कार्ययोजनाओं की जानकारी दी। उन्होंने कहा कि आज के समय में हमारे वातावरण को संरक्षित रखने हेतु वानिकी एवं खेती को साथ-साथ करने की जरूरत है तथा किसानों को ऐसी खेती को अपनाना चाहिए जिसमें भूमि, जलवायु

तथा जल का संरक्षण किया जा सके। डाॅ. शुक्ला ने जैविक खेती के महत्व तथा बाड़ी में उन्नत फल एवं सब्जी उत्पादन तकनीक पर भी विस्तारपूर्वक चर्चा की।

कार्यक्रम में उष्णकटिबंधीय वन अनुसंधान संस्थान, जबलपुर से आये हुए वैज्ञानिक डाॅ. एस.सी. विश्वास ने अपने उद्बोधन में इस परियोजना के उद्देश्यों के बारे में विस्तारपूर्वक जानकारी दी।

किसानों से आह्वान किया कि इस योजना से श्रीविधि से खेती करने की तकनीक अच्छी तरह सीख कर अधिक से अधिक लाभ प्राप्त करें।

इस अवसर पर भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद देहरादून से आये हुए वैज्ञानिक डाॅ. विकास वत्स ने योजना की मुख्य बिंदुओं पर प्रकाश डाला।

प्रशिक्षण कार्यक्रम में कृषि विज्ञान केंद्र की सस्य वैज्ञानिक, श्रीमती शिल्पा कौशिक ने श्रीविधि से खेती की तकनीक पर प्रशिक्षण प्रदान किया। केन्द्र के पौध रोग वैज्ञानिक श्री जयंत कुमार साहू ने धान के फसल में लगने वाले रोग एवं कीटों के निदान के बारे में प्रशिक्षण दिया। कृषि अभियांत्रिकी वैज्ञानिक श्री पंकज मिंज ने श्री विधि एवं धान की खेती में उपयोग आने वाले कृषि यंत्र तथा खरपतवार नियंत्रण की यांत्रिकी विधि पर विस्तारपूर्वक प्रशिक्षण प्रदान दिया।

इस अवसर पर कृषि विज्ञान केन्द्र की गृह विज्ञान वैज्ञानिक डाॅ. किरण गुप्ता, श्रीमती सुशीला ओहदार तथा अन्य कर्मचारीगण उपस्थित थे।

<http://www.khaskhabarchhattisgarh.com/article/view?id=3712>

3 July 2019

Feedback of SRI Training Program

#	Name	Address	General Training Facility	Training Material	Training Resources	Training Information	What would you like in training	What did you get in training	Would you like to apply this on your Field	Any Suggestion
1	Khemchand Sumer	Matiadand	Very Good	Very Good	Very Good	Very Good	Good information of SRI technique	New method for rice cultivation	Yes	Duration of Training days should be more
2	Dhaneshwar Das	Madai	Good	Very Good	Very Good	Good	Good to know about SRI technique	New technique would improve productivity of rice and vegetable	Yes	All villages of Marwahi block should be benefitted
3	Amol Singh	Madai	Very Good	Very Good	Very Good	Very Good	Information was very good	Fruitful information on SRI	Yes	Want to participate again, Seed should be provide
4	Kamal Singh	Amaratikra	Very Good	Very Good	Very Good	Very Good	Information regarding agriculture and Horticulture were very useful. Good information to get High yield in lesser time with environmental protection	High yield from SRI method	Yes	Related department should visit field to solve field level problem

5	Jai Singh Saroita	Danikundi	Very Good	Very Good	Good	Good	New method for Paddy farming	SRI methods and organic farming information	Yes	Training should be arranged for Marwahi area commites
6	Thakur Prasad	Matiadand	Very Good	Very Good	Good	Good	SRI technique for Paddy	New technique is very useful	Yes	Village level training should be organised
7	Ram Garib	Matiadand	Very Good	Very Good	Very Good	Very Good	Very good information about SRI, it seems yield could be double	With Paddy new methods to grow Vegetables and fruits	Yes	Training should be more than one day
8	Samay Lal	Mohri	Very Good	Good	Very Good	Good	SRI technique for Paddy	New technique	Yes	Village level training should be organised
9	Sher bahadur	Amaratikra	Very Good	Good	Very Good	Good	Good to know about SRI methodology	New method for paddy	Yes	Village level training should be organised
10	Manohar Marabi	Rumga	Very Good	Good	Very Good	Very Good	SRI methodology	New technique	Yes	Field level demonstration should be incorporated
11	PushpRaj	Kolbira	Very Good	Very Good	Good	Good	New method for Paddy farming	Organic farming and SRI technique is useful	Yes	Training should be arranged for Marwahi area commites
12	Bhawan Singh	Rumga	Very Good	Good	Very Good	Very Good	Very good information about SRI	New technique of farming	Yes	Village level training should be organised

13	Mitholal	Bansital	Very Good	Very Good	Good	Good	Good to know about SRI methodology	New methodology would improve productivity	Yes	Field level training should be organised at village level
14	Khelan Singh	Bansital	Very Good	Very Good	Good	Very Good	Methodology of Farming	Learnt about new technique of farming	Yes	Provide tools for farming so that we can apply on field
15	Santosh Singh	Bansital	Good	Very Good	Good	Very Good	Good to know about SRI methodology	Learnt about new technique of farming	Yes	Field level training should be organised at village level
16	Chain Singh Sarota	Bansital	Good	Very Good	Good	Very Good	SRI technique for Paddy farming	New methods for paddy and weed control	Yes	Field level training should be arranged
17	RoopSingh	Runga	Very Good	Very Good	Very Good	Very Good	SRI technique for Paddy farming would increase productivity	New method for paddy	Yes	Training should be more than one day
18	Deep Kumari Oowati	Bansital	Very Good	Very Good	Good	Good	New method for paddy	New methods for paddy and weed control	Yes	Field level training should be arranged
19	Kamlabai Bantan	Matiadand	Very Good	Very Good	Very Good	Very Good	Good information on new technique of agriculture and vegetable growing	Selection of good seed and control of disease	Yes	Soil testing by related department and suggestion would improve the situation
20	Ushabai	Bansital	Very Good	Good	Very Good	Good	New method for paddy farming	Learnt about new technique of farming	Yes	Training should be arranged for Marwahi area committees

21	Budhwaria Marawi	Madai	Very Good	Very Good	Good	Very Good	New method for paddy farming	Organic farming and SRI technique is useful	Yes	Training should be arranged for Marwahi area committees
22	Sushila Shyam	Runga	Very Good	Very Good	Good	Very Good	New method for paddy farming	Organic farming and SRI technique is useful	Yes	Training should be arranged for Marwahi area committees
23	Lakha Portay	Madai	Very Good	Very Good	Good	Good	Good information on new technique of agriculture and vegetable growing	Organic farming and SRI technique is useful	Yes	Training should be arranged for Marwahi area committees
24	Kunti Devi	Madai	Very Good	Very Good	Good	Good	New technique of agriculture, horticulture and vegetable growing	Organic farming and SRI technique is useful	Yes	Training should be arranged for Marwahi area committees
25	Suresh Kumar	Runga	Good	Good	Good	Good	know about SRI technique for paddy farming	New method would improve productivity and control weed	Yes	Field level demonstration would be arranged
26	Suraj Kumar Sumer	Matiadand	Very Good	Very Good	Very Good	Very Good	Very good information on SRI technique	Use of Organic manure, Biopesticides and Bioinsecticides would improve productivity	Yes	
27	Ramsingh	Amaratikra	Very Good	Good	Very Good	Very Good	Good to know about SRI methodology	New technique for paddy farming	Yes	Training should be organised at village level and with field level demonstration

Scale of Ranking: 1 - Poor, 2 - Satisfactory, 3 - Fair, 4 - Good, 5 -Very Good

PERFORMANCE RATING OF PARTICIPANTS

S.no.	Name	Address	General Training Facility	Training Material	Training Resources	Training Information	Sum	MM	Average
1	Khemchand Sumer	Matiadand	5	5	5	5	20	20	100
2	Dhaneshwar Das	Madai	4	5	5	4	18	20	90
3	Amol Singh	Madai	5	5	5	5	20	20	100
4	Kamal Singh	Amaratikra	5	5	5	5	20	20	100
5	Jai Singh Saroita	Danikundi	5	5	4	4	18	20	90
6	Thakur Prasad	Matiadand	5	5	4	4	18	20	90
7	Ram Garib	Matiadand	5	5	5	5	20	20	100
8	Samay Lal	Mohri	5	4	5	4	18	20	90
9	Sher bahadur	Amaratikra	5	4	5	4	18	20	90
10	Manohar Marabi	Rumga	5	4	5	5	19	20	95
11	PushpRaj	Kolbira	5	5	4	4	18	20	90
12	Bhawan Singh	Rumga	5	4	5	5	19	20	95
13	Mitholal	Bansital	5	5	4	4	18	20	90
14	Khelan Singh	Bansital	5	5	4	5	19	20	95
15	Santosh Singh	Bansital	4	5	4	5	18	20	90
16	Chain Singh Sarota	Bansital	4	5	4	5	18	20	90
17	RoopSingh	Rumga	5	5	5	5	20	20	100
18	Deep Kumari Oowati	Bansital	5	5	4	4	18	20	90
19	Kamlabai Bantan	Matiadand	5	5	5	5	20	20	100
20	Ushabai	Bansital	5	4	5	4	18	20	90
21	Budhwaria Marawi	Madai	5	5	4	5	19	20	95
22	Sushila Shyam	Rumga	5	5	4	5	19	20	95
23	Lakha Portay	Madai	5	5	4	4	18	20	90
24	Kunti Devi	Madai	5	5	4	4	18	20	90
25	Suresh Kumar	Rumga	4	4	4	4	16	20	80
26	Suraj Kumar Sumer	Matiadand	5	5	5	5	20	20	100
27	Ramsingh	Amaratikra	5	4	5	5	19	20	95

(Performance rating on the attributes should done on the scale of 0-5)

Consolidated Abstract and Summary of the Individual Feedback

#	General Training Facility	Training Material	Training Resources	Training Information
1	5	5	5	5
2	4	5	5	4
3	5	5	5	5
4	5	5	5	5
5	5	5	4	4
6	5	5	4	4
7	5	5	5	5
8	5	4	5	4
9	5	4	5	4
10	5	4	5	5
11	5	5	4	4
12	5	4	5	5
13	5	5	4	4
14	5	5	4	5
15	4	5	4	5
16	4	5	4	5
17	5	5	5	5
18	5	5	4	4
19	5	5	5	5
20	5	4	5	4
21	5	5	4	5
22	5	5	4	5
23	5	5	4	4
24	5	5	4	4
25	4	4	4	4
26	5	5	5	5
27	5	4	5	5
Sum	131	128	122	123
Average	4.85	4.74	4.52	4.56

Overall average rating of the training programme: 4.67/5.0

Topic	Score
General Training Facility	4.85
Training Material	4.74
Training Resources	4.52
Training Information	4.56
Average	4.67

Scale of Ranking: 1 - Poor, 2 - Satisfactory, 3 - Fair, 4 - Good, 5 -Very Good



Major Findings of Feedback

- Duration of training should be increased
- Training should be organised in villages with field level demonstration
- Agriculture tools and High Yield seeds should be provided
- Series of trainings should be organised with Van Samities