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## Documentation of integrated farming system models

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**Abstract**

The study was conducted during the year 2019-20 in the Kolhapur district of Maharashtra state. The present investigation "Documentation of Integrated Farming System in Kolhapur district" was conducted in whole Kolhapur district i.e. twelve tahsils. Six to eight villages from each tahsil and 4-5 respondents having at least four components of IFS from each village were selected. Data were collected by personally interviewing 150 farmers with the help of specially designed interview schedule. Collected data were analyzed with the help of suitable statistical methods. The analysis of the result showed that the Agriculture + Dairy + Horticulture + Vermicompost is the famous IFS model in Kolhapur district. Near about 31.33 per cent of the respondents were having this model on their farm followed by Agriculture + Dairy + Horticulture + Agro- processing (12.67 per cent), Agriculture + Dairy + Horticulture + Poultry (11.33 per cent), Agriculture + Dairy + Horticulture (Floriculture) + Sheep (8.67 per cent), Agriculture + Dairy + Horticulture + Goat (8.00 per cent), Agriculture + Dairy + Goat + Vermicompost (4.67 per cent), Agriculture + Dairy + Horticulture + Sericulture (3.33 per cent), etc.

**Keywords:** Documentation, integrated farming system

**Introduction**

Concept of Integrated Farming System (IFS) is not new concept for farmers. It was started with civilization of humankind and its has been thousands of year ago initially in India Integrated crop-livestock farming system had been started. But now days in this system more other enterprises are combined for sustainable farming like horticulture, agro-forestry, silviculture, mushroom, beekeeping, poultry, fishery, duckery, biogas, crop and livestock (dairy, pig, goat, and sheep). IFS is a biologically integrated systems, which integrates natural resources in a regulation mechanism into farming activities to achieve maximum replacement of off-farm inputs, secures sustainable production of high quality food and other products through ecologically preferred technologies, sustain farm income, eliminates or reduces sources of present environmental pollutions generated by agriculture and sustains the multiple function of agriculture.

1. Crops, livestock, birds, and trees are the major components of any IFS.
2. Crops may have subsystem like mono-crop, mixed/intercrop/sequential crop, multi-tier crops of cereals, pulses, oilseeds, sugar crops, fodder, vegetable, fruits, flowers, etc.
3. Livestock components may be cows, buffaloes, goats and sheep.
4. Tree components may include timber, fuel, and fodder and fruit trees.
5. Other enterprises like apiculture, sericulture, poultry, and mushroom

To improve food nutritional livelihood, financial security and management of natural resources for holistic improvement of small and marginal farmers through integrated farming system, ICAR has established All India crop research project in Integrated Farming System in central campus.

**Methodology**

The study was conducted during the year 2019-20 in the Kolhapur district of Maharashtra state. The present investigation "Documentation of Integrated Farming System in Kolhapur district" was conducted in whole Kolhapur district i.e. twelve tahsils. Six to eight villages from each tahsil and 4-5 respondents having at least four components of IFS from each village were selected. Frequency, Percentage, mean and standard deviation these statistical tools were used to analyze the data. Responses regarding the IFS models were recorded with the help of structured interview schedule. The data was collected personally with the help of structured interview schedule as per the method given. The same was analyzed and presented in the following tables.

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**Result and Discussion****Documentation of Integrated Farming System Models.****Table 1:** Documented IFS models

Sr. No.	Documented IFS models	Respondent (N = 150)		Rank
		Frequency	Percentage	
1	Agriculture + Dairy + Horticulture + Vermicompost	47	31.33	I
2	Agriculture + Dairy + Horticulture + Agro- processing	19	12.67	II
3	Agriculture + Dairy + Horticulture + Poultry	17	11.33	III
4	Agriculture + Dairy + Horticulture (Floriculture) + Sheep	13	8.67	IV
5	Agriculture + Dairy + Horticulture + Goat	12	8.00	V
6	Agriculture + Dairy + Goat + Vermicompost	7	4.67	VI
7	Agriculture + Dairy + Horticulture + Sericulture	5	3.33	VII
8	Agriculture + Dairy + Vermicompost + Agroprocessing	4	2.67	VIII
9	Agriculture + Dairy + Horticulture + Aquaculture/ Farmpond	4	2.67	VIII
10	Agriculture + Dairy + Horticulture (Nursery) + Vermicompost	4	2.67	VIII
11	Agriculture + Dairy + Horticulture (Floriculture) + Aquaculture/ Farmpond	4	2.67	VIII
12	Agriculture + Dairy + Horticulture + Sheep	4	2.67	VIII
13	Agriculture + Dairy + Horticulture + Goat	4	2.67	VIII
14	Agriculture + Dairy + Horticulture (Fruit processing) + Sheep	4	2.67	VIII
15	Agriculture + Dairy + Horticulture + Aquaculture	2	1.33	IX
	<b>Total</b>	<b>150</b>	<b>100.00</b>	

Data from Table 1 indicates that, Agriculture + Dairy + Horticulture + Vermicompost is the famous IFS model in Kolhapur district. Near about 31.33 per cent of the respondents were having this model on their farm followed by Agriculture + Dairy + Horticulture + Agro- processing (12.67 per cent), Agriculture + Dairy + Horticulture + Poultry (11.33 per cent), Agriculture + Dairy + Horticulture (Floriculture) + Sheep (8.67 per cent), Agriculture + Dairy + Horticulture + Goat (8.00 per cent), Agriculture + Dairy + Goat + Vermicompost (4.67 per cent), Agriculture + Dairy + Horticulture + Sericulture (3.33 per cent). IFS Models i.e. Agriculture + Dairy + Vermicompost + Agro-processing, Agriculture + Dairy + Horticulture + Aquaculture/ Farmpond, Agriculture + Dairy + Horticulture (Nursery) + Vermicompost, Agriculture + Dairy + Horticulture (Floriculture) + Aquaculture/ Farmpond, Agriculture + Dairy + Horticulture + Sheep, Agriculture + Dairy + Horticulture + Goat, Agriculture + Dairy + Horticulture (Fruit processing) + Sheep were being followed by 2.67 per cent of the respondents and remaining 1.33 per cent of the respondents followed the Agriculture + Dairy + Horticulture + Aquaculture model on their farm.

**Conclusions**

It can be concluded that, Agriculture + Dairy + Horticulture + Vermicompost is the famous IFS model in Kolhapur district. About 31.33 per cent of the respondents were having this model on their farm followed by Agriculture + Dairy + Horticulture + Agro- processing (12.67 per cent), Agriculture + Dairy + Horticulture + Poultry (11.33 per cent), Agriculture + Dairy + Horticulture (Floriculture) + Sheep (8.67 per cent), Agriculture + Dairy + Horticulture + Goat (8.00 per cent), Agriculture + Dairy + Goat + Vermicompost (4.67 per cent), Agriculture + Dairy + Horticulture + Sericulture (3.33 per cent), etc.

**References**

1. Alam SD. Perception preferences & attitude of Bangladesh farmers towards home garden farming system Small scale forestry 2010;9(2):213-226.
2. Anonymous, 2019. <https://economictimes.com>

3. Chaawla NK, Kurup MPG, Sharma VP. Animal Husbandry. State of Indian farmer. A millennium study, Department of Agriculture and cooperation, Ministry of Agriculture, Government of India, New Delhi and Academic Foundation. New Delhi 2004.
4. Jaganathan D, Padmanabhan VB, Bhaskaran C, Chandru A, Lenin V. Attitude of vegetable growers towards organic farming practices. Indian Journal of Extension Education 2009;45(3-4):63-67.
5. Kadam SS, Hatey AA, Nikam TR, Landge SP, Palampalley HY. Constraints of IFS in Konkan region of Maharashtra- A case study. In: 22nd national seminar on "Role of Extension in Integrated Farming System for sustainable rural livelihood", 9th -10th Dec, Maharashtra 2010, pp. 101.
6. Kadam JR. A study on the adoption behaviour of the commercial mango growers with reference to commercial mango production technology. Ph.D. thesis (Unpub.), Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (M.S.) 2006.