

RESEARCH PAPER

Net worth statement, income statement and performance of residential farm business in Maharashtra

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Received : 12.01.2017; Revised : 05.03.2017; Accepted : 19.03.2017

ABSTRACT

The study was carried out during the year 2013-14 in Parbhani district of Maharashtra. About 48 residential farms were randomly selected from sixteen villages of two tehsils of Parbhani district of Maharashtra. Data were collected by personal interview method by using pretested schedule. The results revealed that, current asset was Rs. 541522.89 while intermediate asset was Rs. 109321.64 and long term asset was Rs.2071565.70. Hence, total asset was Rs. 2722410.23. The amount of total liability was Rs.241922.58 in which long term liability was Rs. 125533.53 followed by intermediate liability Rs. 29769.05 and current liability was Rs. 86620. Hence, net worth or equity was Rs.2480487.65. In income statement, gross cash income was Rs. 474092.89 and amount of total receipt was Rs. 630592.89. Total expense was Rs. 285890.17. Amount of net farm income was Rs. 344702.72. In regards to performance of residential farm business, current ratio was found to be 6.25. The intermediate ratio was found to be 5.59. The net capital ratio was 11.25. Current liability ratio was 0.03 which indicated negligible amount of current liability as compared to owner's equity. Debt-equity ratio was 0.09 and Equity value ratio was 0.91 on residential farm business. Operating ratio was found to be 0.42. Fixed ratio was 0.17. and gross net profit ratio was found to be 0.60.

KEY WORDS : Net worth statement, Income statement, Residential farm

How to cite this paper : Pawar, D.B. and Kauthekar, P.U. (2017). Net worth statement, income statement and performance of residential farm business in Maharashtra. *Internat. J. Com. & Bus. Manage.*, 10(1) : 20-24, DOI: 10.15740/HAS/IJCBM/10.1/20-24.

The concept of residential farm is different than the farm house. Farm house is really not a investment on business point of view but reside the owner and his family occasionally. This house is considered as precious of an owner. The farm is an

income source but owner and his family is not surveying on such farm. In this situation more importance is given to house rather than farm, because farm is not run for business point of view. Owner's large income is from other business, industries and services which are established in different cities. Such type of farm houses are few in numbers and considered as a sign of a rich man.

Residential farm is the farm in which importance is given to farm itself rather than residence. Farm owner and his family are residing always in order to run the farm business.

In other words, farm is a business unit which gives the major source of income to farm family on which the

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family is survives. Such residence is well constructed with required space and facilities. It is considered for need of farmer. It is seen that the farmer is living on residential farm for business point of view. Residential farm consist with facilities like dwelling house, bullock shed, milch animal shed, implement shed, machinery shed, storage house, approach roads, electricity, irrigation facilities. Members of residential farm family may be coming in village occasionally for attaining social ceremony and other religious functions. It is possible on residential farm to do different farming practices in early morning or late night hours, like the tractor operations *i.e.* ploughing, harrowing and clod crushing, because owner of the farm is present on the farm. Farmer can take farming decision according to the convenience of the nature of weather, availability of electricity or may be his own time. He can do any farm operation without any boundation and burden.

METHODOLOGY

Sampling design :

Multistage sampling design was adopted for selection of district, tehsils, villages and residential farms. In the first stage, the Parbhani district was purposively selected of residential farms. In the second stage, Parbhani and Purna tehsils were selected on the basis of higher area under residential farm. In the third stage eight villages were selected from the each tehsils on the basis of higher area under residential farms. From Parbhani tehsil villages were namely Mirkhel, Pandhari, Paralgavan, Pingli, Porjawala, Raipur, Shirshi Bk., Tadlimbla were from Parbhani district and Aherwadi, Deolgaon, Dhanora, Khadala, Khujada, Makhani, Navki and Phulkalas were selected from Purna tahsil. In the fourth stage, from each village, the list of residential farmers along with their holding sizes was obtained. Three residential farmers were randomly selected from each of the villages. In this way, from sixteen villages, 48 farmers were selected for the present study. The data were collected during the year 2013-14 for the period from 1th July, 2013 to 30th June, 2014. The budgeting technique and ratio analysis were used to analyze the data.

ANALYSIS AND DISCUSSION

Net worth statement and income statement of residential farm was estimated as well ratio analysis with

net worth statement and income statement on residential and farm business with following heads :

Per farm net worth statement on residential farm business :

Net worth statement on residential farm was calculated and is presented in Table 1. The results revealed that, current asset cash in bank, cash in hand, A/C receivable, reserve fund and bonds were accumulated assets. Gross cash income from income statement was spilted into sale crop (Rs. 70652) inventory of crop (Rs. 296755) and livestock receipt (Rs. 106685.89). Medium term assets was Rs. 109321.64. In local cow herd size was 0.96. In appendix depreciation was calculated at the rate of 12.5 per cent. It is converted into value of herd size. Thus, value of local cow herd was Rs. 23270.83. Similarly, the value of crossbred cow herd, local buffalo herd, improved buffalo herd, goat trip, poultry flock were sum upto determine medium term asst, from respective appendix. Long term asset was Rs. 2071565.70. In long term asst commonly used asset was Rs. 36210.50. The depreciation of each crop was given according to the respective area under crop. Sum of the depreciation of all crops is total depreciation on farm of the asset. Total depreciation of the farm is converted in to capital asset by multiplying used asset on the farm. Similarly, depreciation of shed under herd size were sum of. This total was multiplied by 10 and was considered as investment on animal shed. The amount of animal shed was Rs. 9355.20. Irrigation structure was Rs. 50,000 vlaue of 3.75 hectares of land was Rs. 1880000. Total asset was found to Rs. 2722410.23.

Current liability was Rs. 86620 in which institutional crop loan was Rs. 53020 followed by non-institutional loan (Rs. 19600) and A/C payable Rs. 14000. Medium term liability was Rs. 29769.05 in which loan on cow, buffalo and bullock were given. Long term liability was Rs. 125533.53. It consists with the loan an implement, small machines, irrigation, structure, storage structure and land purchasing item. Thus, total liability was Rs. 241922.58. Net worth or equity was Rs. 2480487.65 that could be calculated by subtracting total liability from total asset.

Per farm income statement on residential farm :

Income statement on residential farm was calculated and it presented in Table 2. The results

revealed that total receipt was Rs. 630592.89 which was divided into gross cash income (Rs. 474092.89) and increase in asset (Rs. 156500). In gross cash income, income from all crops as per area and all livestock as per herd size had been sum of. On the contrary, total expense was Rs. 285890.17, in which gross cash expense was Rs. 202437.93 and fixed expense was Rs. 83452.24. Gross cash expense was formed by sum of expenditure on individual item in crop production as well as in livestock. Expenditure of hired human labour was sum of from all crop enterprises as well as livestock enterprises. In this way, employment of hired human labour was 153.60 mandays on residential farm. The results are conformity to the results obtained by Bankar (2010) with respect to net worth statement and income

statement.

Estimates of ratios with to net statement and income statement on residential farm :

Estimates of ratios with net statement and income statement on residential farm were calculated and are presented in Table 3. The results revealed that, current asset was greater than current liability. Hence, current ratio was found to be 6.25. It inferred that there was liquidity within one year time. In regard to intermediate ratio which is known as working ratio and it was found to be 5.59. It implied that farm business was running in sound condition because this ratio was greater than unity. The net capital ratio indicates the long term liquidity position of residential farm. This ratio was 11.25 which

Table 1 : Per farm net worth statement on residential farm for the year 2014-15

Asset	Physical quantity	Amount (Rs./farm)	Liability	Physical quantity (unit/farm)	Amount (Rs./farm)
Cash in bank	---	15530.00	Institutional crop loan	---	53020.00
Cash in hand	---	2300.00	Non- institutional loan	---	19600.00
A/C receivable	---	9700.00	A/C payable	---	14000.00
Reserved fund	---	35400.00			
Bonds	---	4500.00			
Salecrop	---	70652.00			
Inventory of crop	---	296755.00			
Livestock receipt	---	106685.89			
Current asset		541522.89	Current liability		86620.00
Local cow herd	0.96	23270.83	Cow loan	0.12	2908.85
Crossbreed cow herd	0.14	5729.16	Buffalo loan	0.13	3400.00
Local buffalo herd	0.48	18333.33	Goat	0.01	210.00
Improved buffalo herd	0.10	6041.66	Poultry	0.01	250.20
Goat trip	0.02	395.83	Bullock	0.32	23000.00
Poultry flock	0.02	520.83			
Bullock pair	0.97	55000.00			
Medium term asset		109321.64	Medium term liability		29769.05
Commonly used asset	---	36210.50	Implement loan	---	8421.42
Animal shed (no.)	1.00	9355.20	Small machinery loan	---	2112.11
Irrigation structure	---	96000.00	Irrigation structure	---	27000.00
Storage structure	---	50000.00	Animal shed loan	---	3000.00
			Storage structure loan	---	7000.00
Land holding (ha)	3.75	1880000.00	Land purchasing	---	78000.00
Long term asset		2071565.70	Long term liability	---	125533.53
Total asset		2722410.23	Total liability	---	241922.58
			Net worth or equity	---	2480487.65

Table 2 : Per farm income statement on residential farm for the year 2014-15

Receipt	Physical quantity (unit/farm)	Amount (Rs./farm)	Expense	Physical quantity (unit/farm)	Amount (Rs./farm)
Soybean (ha)	1.74	92661.50	Hired H.L. (manday)	153.60	30720.00
Cotton (ha)	0.97	89075.50	Bullock labour (pairday)	39.00	25842.96
Pigeonpea (ha)	0.29	23212.00	Machine labour (hour)	31.12	15560.00
Greengram (ha)	0.19	12678.00	Seed (kg)	125.95	10980.40
Turmeric (ha)	0.05	7760.00	Set /rhizome (q)	12.72	4230.00
Wheat (ha)	0.18	8547.50	Manure (q)	28.34	4251.00
Sugarcane (ha)	0.29	48167.00	Fertilizer (kg) N	236.92	3079.96
<i>Rabi</i> Jowar (ha)	1.03	60878.00	P	200.60	9227.66
Chickpea (ha)	0.03	1942.50	K	57.61	1555.47
Okra (ha)	0.04	9360.00	Plant protection (L)	6.70	3350.00
Tomato (ha)	0.01	2550.00	Irrigation (m ³)	5350.16	13482.41
Bhindi (ha)	0.02	4100.00	Land revenue	---	306.42
Fodder maize (ha)	0.04	2125.00	Incidental exp.	---	1369.80
Mango (ha)	0.03	4650.00	Interest on W.C.	---	11711.35
Milk in dairy (L)	1633.02	71818.74	Family H.L.(Manday)	255.09	51018.00
FYM (q)	52.55	7883.25	Green fodder (q)	13.45	2690.00
Calf (no.)	1.63	13123.90	Dry fodder (q)	8.46	5922.00
Young goat (no.)	0.20	960.00	Conc.and feed (q)	2.76	6210.00
Poultry chick (no)	55.00	11000.00	Vaccination (no.)	2.33	186.40
Eggs (no)	190.00	1900.00	Water for livestock (m ³)	64.66	162.94
			Light (unit)	96.86	581.16
Gross cash income		474092.89	Gross cash expense		202437.93
Appreciation of young calf (no)	1.63	5789.61	Dep.commenly used asset and shed	---	4559.44
Appreciation of young goat (no)	0.20	710.39	Dep. on livestock	---	6786.42
Appreciation of land holding (ha)	3.75	150000.00	Interest on F.C.	---	5012.03
			Interset on livestock	---	5972.06
			Rental value of land	---	60928.04
			Amortization cost	---	194.25
Increase in asset	---	156500.00	Fixed expense	---	83452.24
Total receipt	---	630592.89	Total expense	---	285890.17
			Net farm income	----	344702.72

Table 3: Performance of residential farm business through ratio analysis			
Formula as estimator		Estimate	Ratio
Current ratio	$= \frac{\text{Current asset}}{\text{Current liability}}$	$= \frac{541522.89}{86620.00}$	= 6.25
Intermediate ratio	$= \frac{\text{Current asset} + \text{intermediate asset}}{\text{Current liability} + \text{intermediate liability}}$	$= \frac{650844.53}{116389.05}$	= 5.59
Net capital ratio	$= \frac{\text{Total asset}}{\text{Total liability}}$	$= \frac{2722410.23}{241922.58}$	= 11.25
Current liability ratio	$= \frac{\text{Current liability}}{\text{Owner's equity}}$	$= \frac{86620.00}{2480487.65}$	= 0.03
Debt. equity ratio	$= \frac{\text{Total debt.}}{\text{Owner's equity}}$	$= \frac{22340.00}{2480487.65}$	= 0.11
Equity value ratio	$= \frac{\text{Owner's equity}}{\text{Value of asset}}$	$= \frac{2480487.6}{186808.05}$	= 0.91
Operating ratio	$= \frac{\text{Operating expense}}{\text{Gross income}}$	$= \frac{202437.93}{474092.89}$	= 0.42
Fixed ratio	$= \frac{\text{Fixed expense}}{\text{Gross income}}$	$= \frac{83452.24}{474092.89}$	= 0.17
Gross ratio	$= \frac{\text{Total expense}}{\text{Gross income}}$	$= \frac{285896.17}{474092.89}$	= 0.60

indicated that the funds of residential farming business were safe. Current liability ratio was 0.03 which indicated negligible amount of current liability as compared to owner's equity. Debt-equity ratio was 0.09 which showed all amount of liability as compared to the equity. Equity value ratio was 0.91 which indicated the largest amount of owned fund in residential farm business. Operating ratio was found to be 0.42. This ratio showed the magnitude of working expenditure incurred from a rupee of gross income. Fixed ratio was 0.17. This ratio indicated the relationship between fixed expenses and gross income. Gross profit ratio was found to be 0.60. It is the relationship between total expense and gross income. It must be less than one. It is known as input-output ratio which indicated that when gross income is rupee one, the expenditure is rupee 0.60.

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