



**Research Paper**

# Net worth statement, income statement and performance of dryland farm business in Nanded of Maharashtra

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**ABSTRACT :** The study was carried out during the year 2013-14 in Nanded district of Maharashtra. About 48 dryland farms were randomly selected from sixteen villages of two tehsils of Nanded district of Maharashtra. Data were collected by personal interview method by using pretested schedule. The results revealed that, current asset was Rs. 346821.02 while intermediate asset was Rs. 64063.56 and long term asset was Rs.1255151.00. Hence, total asset was Rs. 1666035.58. The amount of total liability was Rs.136137.00 in which long term liability was Rs. 84375.00 followed by intermediate liability Rs. 10200 and current liability was (Rs. 41562.00). Hence, net worth or equity was Rs. 1529898.58. In income statement, gross cash income was Rs. 428185.14 and amount of total receipt was Rs. 378573.46. Total expense was Rs. 230304.93. Amount of net farm income was Rs. 148268.53. In regards to performance of dryland farm business, current ratio was found to be 8.34. The intermediate ratio was found to be 7.93. The net capital ratio was 12.23. Current liability ratio was 0.92 which indicated negligible amount of current liability as compared to owner's equity. Debt-equity ratio was 0.08 and Equity value ratio was 0.03 on dryland farm business. Operating ratio was found to be 0.50. Fixed ratio was 0.17. and gross net profit ratio was found to be 0.43.

**KEY WORDS:** Net worth statement, Income statement, Dryland farm

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## INTRODUCTION :

Dryland farming which is cultivation of crops with annual rainfall of 750-1150 mm is known as dryland farming. Dryland farming relates for adoption of soil and moisture conservation practices and has also provision of drainage especially in black soils. India ranks the first among the dryland agricultural countries in terms of both extent and value of produce. Out of every three hectares

of cultivated land in the country nearly two hectares are under the influence of dryland agriculture. Dryland agriculture areas are harsh environment and suffer from a number of constraints such as low and uncertain rainfall, limited irrigation, low moisture, poor and degraded resource base, declining soil fertility, low income and low saving capacity, lack of infrastructure, lack of adequate and timely credit, low capital formation, dominance of low value of crops, low productivity and inadequate

attention paid by policy makers and scientists.

In dryland agriculture, scarcity of water is the main problem. Apart from low and erratic behaviour of rainfall and limited water holding capacity of the soil constitute the principle constraint in crop production in dryland area. Yield fluctuations are high mainly due to vagaries of weather. Monsoon starts in the month of June and ends in last week of October. Most of the rainfall is received during this period with undulating topography and low moisture retention capacity of the soil.

## MATERIALS AND METHODS :

### Sampling design :

Multistage sampling design was adopted for selection of district, tehsils, villages and dryland farms. In the first stage, the Nanded district was purposively selected because of mostly existence of dryland farming. In the second stage, Himayatnagar and Naigaon tehsils were selected on the basis of higher area under dryland farms. In the third stage, eight villages were selected

from the each of tehsils on the basis of higher area under dryland farms. From Himayatnagar tehsil village were selected namely Borgadi, Dhanora, Jawalgaon, Karla, Pawan, Sarsum, Siranjani and Sonariwhile from Naigaon tehsil villages were selected namely Aluwadgaon, Balegaon, Benderi, Degaon, Lalwandi, Salegaon, Sangvi and Suilegaon. In the fourth stage, from each village, the list of dryland farmers along with their holding sizes was obtained. Three dryland 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 1<sup>st</sup> July, 2013 to 30<sup>th</sup> June, 2014. The budgeting technique and ratio analysis were used to analyze the data.

## RESULTS AND DATA ANALYSIS :

Net worth statement and income statement of dryland farm was estimated as well ratio analysis with net worth statement and income statement on dryland farm business with following heads :

**Table 1 : Per farm net worth statement on dryland farm**

Sr. No.	Asset	Physical quantity (unit/farm)	Amount (Rs./farm)	Sr. No.	Liability	Physical quantity (unit/farm)	Amount (Rs./farm)
1.	Cash in bank	---	2100.00	1.	Institutional crop loan	---	35450.50
2.	Cash in hand	---	1350.00	2.	Loan for feed (q)	2.32	3250.00
3.	Cash in receipt	---	750.00	3.	Loan for fodders (q)	8.17	2861.50
4.	A/C receivable	---	1250.00				
5.	Reserved fund	---	1600.00				
6.	Bonds	---	550.00				
7.	Sale crops	---	166885.82				
8.	Inventory	--	40000.00				
9.	Chicken (no)	2.03	233.60				
10.	Milk (L)	2722.29	108298.93				
11.	Calf (no)	6.27	19767.03				
12.	FYM (q)	40.45	4045.64				
13.	Current asset		346821.02	4.	Current liability		41562.00
14.	Cow herd (no)	1.32	31985.06	5.	Cow loan	0.08	1750.00
15.	Buffalo herd (no)	1.18	26850.00	6.	Buffalo loan	0.32	2650.00
16.	Goat trip (no)	0.38	4780.00	7.	Goat loan	0.16	1450.00
17.	Poultry flock (no)	0.01	448.00	8.	Unsecured loan	---	4350.00
18.	Medium term asset		64063.56	9.	Medium term liability		10200
19.	Animal shed (no)	1.00	8460.00	10.	Machinery loan	---	84375.00
20.	Machinery (no)	---	74000.00				
21.	Land holding (ha)	3.38	1172691.00				
22.	Long term asset	--	1255151.00	11.	Long term liability	---	84375.00
23.	Total asset	---	1666035.58	12.	Total liability	---	136137.00
				13.	Net worth or equity		1529898.58

### Per farm net worth statement on dryland farm business:

Per farm net worth statement on dryland farm was prepared and is presented in Table 1. The results revealed that the net worth or equity was Rs.1529898.58. Total asset was Rs. 1666035.58, it was grouped into current asset (Rs. 346821.02), medium term asset (Rs. 64063.06) and long term asset (Rs. 1255151.00). On the contrary, total liability was Rs. 136137.00 and it was also divided into three groups like current liability (Rs. 41562.00), medium term liability (Rs. 10200.00) and long term liability (Rs. 84375.00).

### Per farm income statement on dryland farm business:

Per farm income statement on dryland farm was prepared and is presented in Table 2. The results revealed

that total asset was Rs. 378573.46 which was divided into gross cash income and increase in asset like Rs. 339223.46 and 39350.00, respectively. From the expense side, total expense was also divided into gross cash expense (Rs.172558.10) and fixed expense (Rs. 57746.83). Total asset subtracted from total receipt it is also known net farm income which found to be Rs. 148268.53.

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

Estimates of ratios with net statement and income statement on dryland 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 8.34. It inferred that there was liquidity within one year time. In regard to intermediate

**Table 2 : Per farm income statement on dryland farm**

Sr. No.	Receipt	Physical quantity (unit/farm)	Amount (Rs./farm)	Sr. No.	Expense	Physical quantity (unit/farm)	Amount (Rs./farm)
1.	Cotton (ha)	1.10	69488.10	1.	Hired human labour (manday)	152.24	24359.34
2.	Soybean (ha)	0.94	50141.48	2.	Bullock labour (pairday)	45.05	17571.40
3.	Pigeonpea (ha)	0.45	18525.15	3.	Machine labour (hour)	28.97	13617.22
4.	Paddy (ha)	0.21	7419.72	4.	Seed (kg)	135.64	11516.65
5.	Greengram (ha)	0.19	6148.40	5.	Manure (q)	57.15	5715.64
6.	Blackgram (ha)	0.14	4807.88	6.	Fertilizer (kg) N	149.64	2015.65
7.	K.jowar (ha)	0.17	5222.74		P	163.69	6834.05
8.	Wheat (ha)	0.15	4965.15		K	43.69	1194.04
9.	Chickpea (ha)	0.68	26398.28	7.	Plant protection (L)	10.91	4149.09
10.	R.jowar (ha)	0.36	13360.32	8.	Irrigation (m <sup>3</sup> )	0.00	0.00
11.	Maize (ha)	0.02	408.69	9.	Land revenue	--	344.29
12.	Milk (L)	2722.29	108298.93	10.	Incidental Exp.	--	884.18
13.	calf (no)	6.27	19767.03	11.	Interest on W. C	--	4780.94
14.	FYM (q)	40.45	4045.64	12.	Family human labour (manday)	53.83	8612.82
15.	Poultry chick (no)	2.03	223.60	13.	Variable cost of dairy	--	70848.29
				14.	Variable cost of poultry	--	113.91
16.	Gross cash income	--	339223.46	15.	Gross cash expense	--	172558.10
17.	Appreciation of young livestock	---	850.00	16.	Dep. commonly used asset	---	2144.78
18.	Appreciation of land	--	38500.00	17.	Interest on fixed capital	--	2359.26
				18.	Rental value of land	--	34127.93
				19.	F.C. of dairy	--	19053.59
				20.	F. C. of poultry	--	61.27
19.	Increase in asset	--	39350.00	21.	Fixed expense	--	57746.83
20.	Total receipt	--	378573.46	22.	Total expense	---	230304.93
				23.	Net farm income	---	148268.53

**Table 3: Estimates of ratios with to net statement and income statement on dryland farm**

Formula as estimator	Estimate	Ratio
Current ratio $N \frac{\text{Current asset}}{\text{Current liability}}$	$= \frac{346821.02}{41562.00}$	= 8.34
Intermediate ratio $N \frac{\text{Current asset} < \text{Intermediate asset}}{\text{Current liability} < \text{Intermediate liability}}$	$= \frac{410884.58}{51762.00}$	= 7.93
Net capital ratio $N \frac{\text{Total asset}}{\text{Total liability}}$	$N \frac{1666035.58}{136137.60}$	= 12.23
Current liability ratio $N \frac{\text{Current liability}}{\text{Owner's equity}}$	$= \frac{1529898.58}{1666035.58}$	= 0.92
Debt. equity ratio $N \frac{\text{Total debt.}}{\text{Owner's equity}}$	$= \frac{136137.00}{1529898.58}$	= 0.08
Equity value ratio $N \frac{\text{Owner's equity}}{\text{Value of asset}}$	$= \frac{41562.00}{15229898.58}$	= 0.03
Operating ratio $N \frac{\text{Operating expense}}{\text{Gross income}}$	$= \frac{172558.10}{339223.46}$	= 0.50
Fixed ratio $N \frac{\text{Fixed expense}}{\text{Gross income}}$	$= \frac{57746.63}{339223.46}$	= 0.17
Gross profit ratio $N \frac{\text{Total expense}}{\text{Gross income}}$	$= \frac{148268.53}{339223.46}$	= 0.43

ratio which is known as working ratio and it was found to be 7.93. 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 dryland farm. This ratio was 12.23 which indicated that the funds of dryland farming business were safe. Current liability ratio was 0.92 which indicated negligible amount of current liability as compared to owner's equity. Debt-equity ratio was 0.08 which showed dryland small amount of liability as compared to the equity. Equity value ratio was 0.03 which indicated the largest amount of owned fund in dryland farm business. Operating ratio was found to be 0.50. 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 0.43. 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 0.43.

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