Prospects and Problems of Local Level Organic Vegetable Production in Bangladesh

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Introduction

- Bangladesh economy is based on Agriculture
- 30.0% GDP comes from Agriculture
- Cropping intensity is 174%
- Excessive pressure on land resources
- Soil fertility is decreasing
- Unbalanced use of chemical fertilizers causing environmental pollution & increasing cost of production

- To get a dynamic agricultural production Bangladesh Agriculture is in the process of transformation from subsistence to commercial farming
- Now a days organic vegetable is a precious and safe food item all over the world
- Through some agencies in Bangladesh some sorts of organic vegetable and fruits are produced and exported to some countries
- But local level production and consumption situation of such product is not encouraging
- Farmer's experiences and views are explored and reflected in this study

Study Objectives

- To find out the adaptiveness of local level organic vegetable production under Bangladesh situations
- To get the farmers reaction about organic products and awareness level about that
- Comparing the effect of using 100% organic source of fertilizer nutrients (NPK) with 75%, 50%, 25% and 0% of that
- To observe market situation and economic harvest of organic products at village level

Methods

Two vegetable grower farmer were selected in two villages

Farmer 1: 5 km away from the town having 1,2 ha land

Farmaer 2: 9 km away from town having 0,33 ha land

Farmers splitted thier field equally into five subplots for different treatments.

Each subplot recieved fertilizer mixtures as given below

Subplot 1: 100% organic NPK (from cowdung, oilcake and ash)

Subplot 2: 75% organic NPK (from cowdung, oilcake and ash)+25% from inorganic fertilizers

Subplot 3: 50% organic NPK (from cowdung, oilcake and ash)+50% from inorganic fertilizers

Subplot 4: 25% organic NPK (from cowdung, oilcake and ash)+75% from inorganic fertilizers

Subplot 5: 0% organic NPK (from cowdung, oilcake and ash)+100% from inorganic fertilizers

- 65 visiting farmers reaction were recorded
- Daily crop sale price were studied
- Two middleman handler (or wholesaller) in the townmarket were interviewed
- Four mustard grower and four Lentil grower farmers in the neighboring plots were interviewed and benefit-cost ratio were compared with tomato production

Results and Discussion

Table: Overhead cost of production and tomato yield

Treatment	Cost of Production/ha (Taka)	Economic Yield (ton/ha)
100% organic plot	102277,5	26,5
75% organic plot	100117,5	27,7
50% organic plot	97875,0	24,7
25% organic plot	95812,5	24,3
0% organic plot	95750,0	22,7

(1 E **(1 Euro = 58.0 Taka)**

Table: Farmers Reaction about quality of Tomato

Treatment	Farmers response
100% organic plot	64,6% farmer responded as very good
75% organic plot	81,5% farmer responded as very good
50% organic plot	73,8 % farmer responded as good
25% organic plot	55,4% farmer responded as moderate
0% organic plot	89,2% farmer responded as nothing special or poor

Fig. Increase in overhead cost and fertilizer cost with orgainc treatments

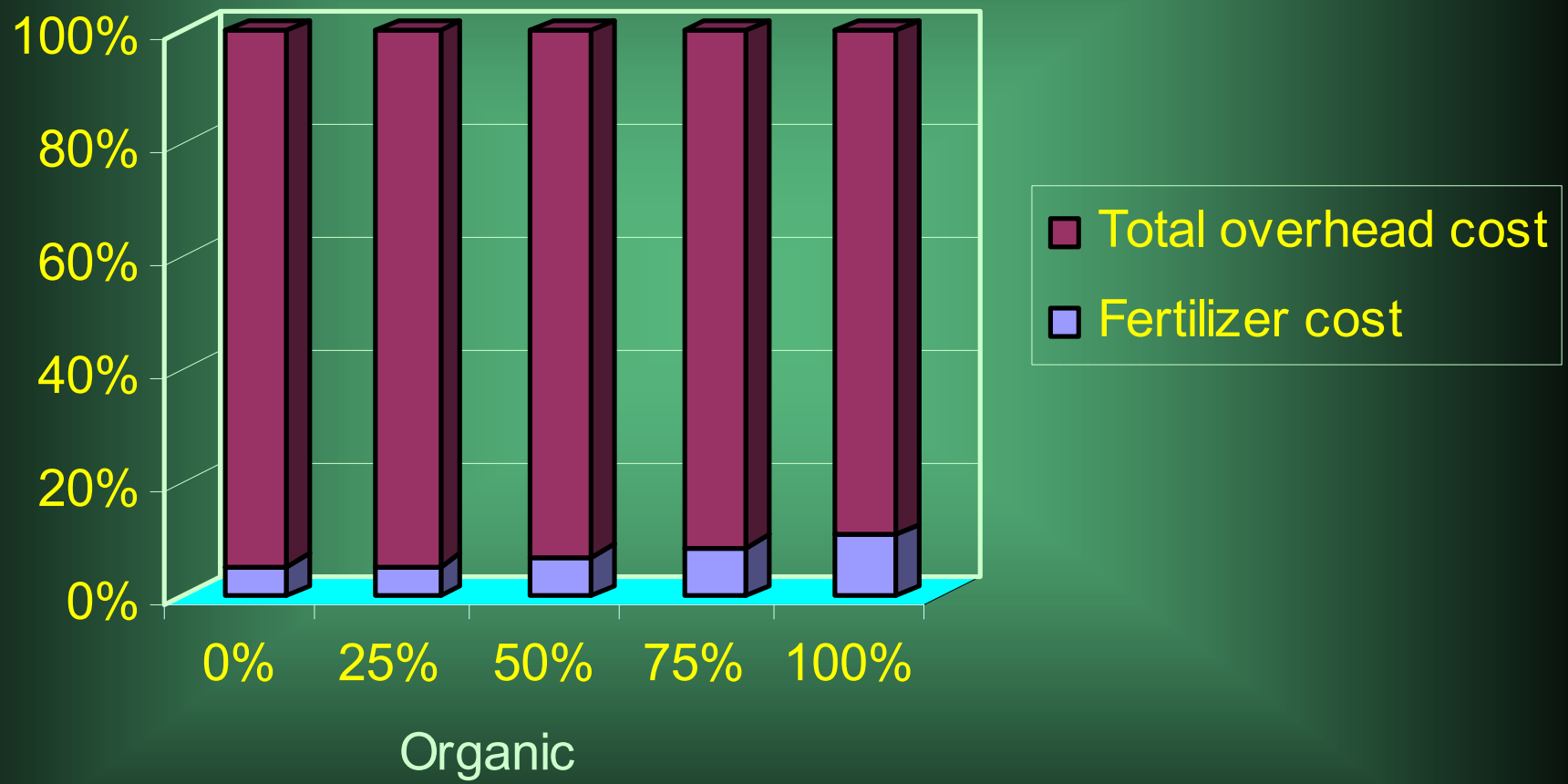

Table: Transaction cost for each kilogram of Tomato (Handling, transport and marketing)

Treatment	Farmer 1 (1,2 ha plot)	Farmer 2 (0,33 ha plot)
100% organic plot & 75/% organic plot	0,982 Taka/kg	1,543 Taka/kg
50% organic plot, 25% organic plot & 0% organic plot	0,997 Taka/kg	1,327 Taka/kg

(1 Euro = 58.0 Taka)

Table: Difference between tomato wholesale and consumers price in the town market

Treatment	Daily Average crop sale price	Average Consumer price
100% organic plot & 75/% organic plot	5,1 Taka/kg	8,16 Taka/kg
50% organic plot, 25% organic plot & 0% organic plot	4,8 Taka/kg	6,87 Taka/kg

(1 Euro = 58.0 Taka)

Table: Benefit-cost ratio in Tomato cultivation compared with lentil and mustard

Crop	Overhead production cost (Taka/ha)	Crop sale (Taka/ha)	Benefit cost ratio
Mustard	11625,0	36000,0	2,10
Lentil	9600,0	27000,0	1,81
Tomato (100% organic)	102277,0	135150,0	0,32
Tomato (75% organic)	100117,0	141270,0	0,41
Tomato (50% organic)	97875,0	118560,0	0,21
Tomato (25% organic)	95812,0	116640,0	0,22
Tomato (0% organic)	95750,0	108960,0	0,14

(1 Euro = 58.0 Taka)

Conclusion and Recommendations

- Aparent quality of organic products are well accepted by the visiting farmers
- Crop sale value for organic products are higher than the others
- Transaction cost for the small growers are quite high
- Farmers are not getting equal benefits in comparison to other general crops
- Market structure is not good for organic products and middleman handlars exploiting a lot
- For the good quality vegetables foreign countries may import organic products from Bangladesh even at a very cheap price (eg. Tomato @ 0,15 Eurocents/kg)
- International Development agencies may come forward to improve the market structure for organic farming in Bangladesh


THANKS TO ALL