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National Centre for Organic Agriculture, Yusipang

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# **COST OF PRODUCTION OF HIGH ALTITUDE ORGANIC RICE AT YUSIPANG 2025**



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## 1.0 Determination of Cost of Production of Organic rice

The National Center for Organic Agriculture (NCOA), Yusipang research farm is a certified Organic farm. It was certified under the Local Organic Assurance System (LOAS) which follows the Bhutan Organic Standards (BOS) of the Bhutan Organic Guarantee System (BOGS). High altitude organic rice cultivation at Yusipang (2600 m asl) was started in 2023. In 2024, the nursery for the two varieties was raised on 1<sup>st</sup> February, 2024 and transplanted on 29<sup>th</sup> April, 2024. The crop was harvested on 28<sup>th</sup> November, 2024.

After successful adaptation of two cold tolerant varieties namely Khangma Maap and Jakarray Naab under organic management regime, the Cost of Production (CoP) of organic rice was determined. The CoP of Organic rice was estimated to be Nu. 80.80 per Kg. The COP of Organic rice was 1.65 times higher than the COP conventional rice which is estimated at Nu. 49 per Kg. The details of the COP are presented in Table 1.



**Figure 1. Activities of organic rice at NCOA**

Table 1. Cost of production of Organic rice at Yusipang, 2024.

i.	Total Yield of organic rice (kg) per acre at NCOA, Yusipang					1643.85	
A. Variable cost							
1. Labor cost							
	Variables	Unit	Quantity	Cost per unit (Nu)	Total cost (Nu) for 0.3 acres	Total cost per acre (Nu)	
i.	Nursery establishment	No	3	1000	3000	10000	
ii.	Nursery weeding and management	No	3	1000	3000	10000	
iii.	First ploughing and field preparation	No	1	1000	1000	3333.33	
iv.	Puddling and bund preparation	No	3	1000	3000	10000	
v.	Nursery uprooting and transplanting	No	3	1000	3000	10000	
vi.	Weeding and irrigation	No	8	1000	6000	20000	
vii.	Power tiller with operator	No	2.5	3500	8750	29166.67	
ix.	Harvesting and threshing	No	3	1000	3000	10000	
Total Labor cost/acre						102500.00	
2. Input cost							
	Variables	Unit	Quantity	Cost per unit (Nu)	Total cost (Nu) for 0.3 acres	Total cost per acre (Nu)	
i.	Plastic for nursery	m	15	80	1200	4000	
ii.	Chicken manure	Bags	20	170	3400	11333.33	
Total Input cost/acre						15333.33	
B. Fixed cost							
	Variables	Unit	Quantity	Cost per unit (Nu)	Total cost (Nu) for 0.3 acres	Total cost per acre (Nu)	
i.	Land rent	Decimal	100	150	4500	15000	
Total Fixed cost/acre						15000	
Total variable cost/acre						117833.33	
Total Fixed cost/acre						15000	
Total Cost of production/acre						132833.33	
Cost per unit (Kg)						80.80*	

**\*1 USD = 85.73 BTN**