

Blacksmith

Blacksmithy is one of the very few traditional artisanal work that has continued to survive in the rural economy due to following reasons:

- The rural economy in India is based on agricultural production and agro processing mostly in tiny scale or domestic units. A substantial majority of agricultural production emanates from small and medium land holdings.
- The preferred designs of hand tools used in agricultural production and post production vary considerably from region to region making it difficult for industrial mass manufacturers to penetrate all areas equally.

But blacksmithy work is facing major issues like :

- Low level of income and productivity – due to shrinking market, increased cost of raw material and charcoal, no significant improvements in the technique used in fabrication, competition from industrial products.



Possible interventions:

1. Increasing productivity & addressing labour issues

- Solar powered DC blower – speeds up the process & provides good temperature control for fabrication. (not connected to grid)
- Currently many blacksmiths hire a daily labour to operate the hand cranked blower used in blacksmith forge and there is a huge labour issue for the same.
- Solar powered grinding tool – increases productivity.

2. Training on scientific techniques to improve the quality of the product and increase fuel efficiency. **Center of technology and development, New Delhi**

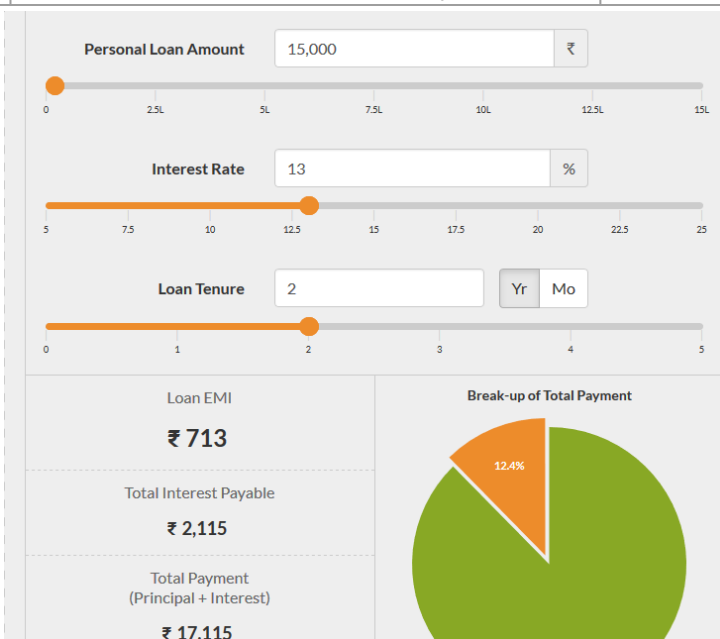
3. **Solution for nomadic blacksmiths** – who travel with their families from one location to other and setup temporary workshops for a period of few days, 1 week or even 1 month based on the demand. Entire family is involved in this work and their children are deprived of education.



Financials

Load: DC Blower x 5 hours/day

Sl. No.	Particulars	Specification	Quantity
1	Solar module	40 Wp	1
2	Battery	20 Ah	1
3	Charge controller	5 A	1
4	DC Blower	15 W, 12 V	1
5	Cable and accessories		As required
System Cost			~Rs.15,500/-



Business for week.

Expenditure			Income		
#	Particulars	Amount	Particulars	Amount	
1	Charcoal (1 bag 50 kgs)	300	New products (Minimum) (1 day)	300	500
2	Wood piece for make handle (10 Rs per piece)	200	Repair of old products(Mini)	200	
3	Labour Expenses 250 per day No of labours required :01	1500	New products (Maximum-5 days)	450	750
4	Food expenses-70 per day	420	Repair of old products(Max-5)	300	
5	Other Expenses	100	Income for 6 days	4250	
	Total	2520	Net profit (4250-2520)	1730	
			Monthly profit (1730X4 weeks)	6920	

After installation of solar blower:

After installation of solar blower Entrepreneur do not need of Labour. So he can save amount of labour charge and his food expenses (1500+420) for a week.	1920
Increase in monthly income (1920X4)	7680
Net profit for a month (7680+6920)	14600

Current methods:



Replaced with

