

## Analysis of nutrition interventions within India's policy framework: Benefit-Cost Analysis Rajasthan

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### Academic Abstract

The prevalence of malnutrition in Rajasthan is extremely high and it performs very badly as compared to other Indian states. The intergenerational cycle of undernourishment is a concern for future prospects of its economic growth as it enters the most productive phase of demographic transition. With half of the pregnant women being anaemic and 23 percent of children being born with low birth weight (NFHS-4), the provision of essential health and nutrition inputs becomes a topmost priority. The Government of India has in place nutrition and health programmes (ICDS and NHM) which include nutrition based interventions. However, the problem in Rajasthan is the low coverage of these interventions over the last 10 years (Kohli et. al., 2017). This study is an attempt to estimate the costs and benefits accruing from increasing the coverage of the national interventions in Rajasthan. The benefits are measured in terms of the number of years of life saved due to decreased child mortality and valued at 3 times the value of GDP/capita. Benefits also include the value of avoiding a brief period of life spent living with the disability arising from nutrition related illness. Five alternate scenarios have been created on the basis of specific nutrition based interventions which include counselling for behaviour change, supplementary food, micronutrient supplements, community based treatment of Severe Acute Malnutrition and an overall package consisting of all interventions. Estimated benefits for Rajasthan from the overall package at 3 times the value of per capita SDP and discounted at 5% are Rs. 91,577 and estimated costs are Rs. 14,144 per beneficiary, resulting in a benefit/cost ratio of approximately 6. The benefit/cost ratios estimated at 3 per cent and 8 per cent discount rate are 12 and 3 respectively. Similar calculations have been carried-out for other four scenarios. To conclude, we observe substantial benefits from delivery of nutritional based interventions although we have used national cost estimates as the sub-national data is unable, but the variation in results is expected to be smaller.

### Web Link

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