



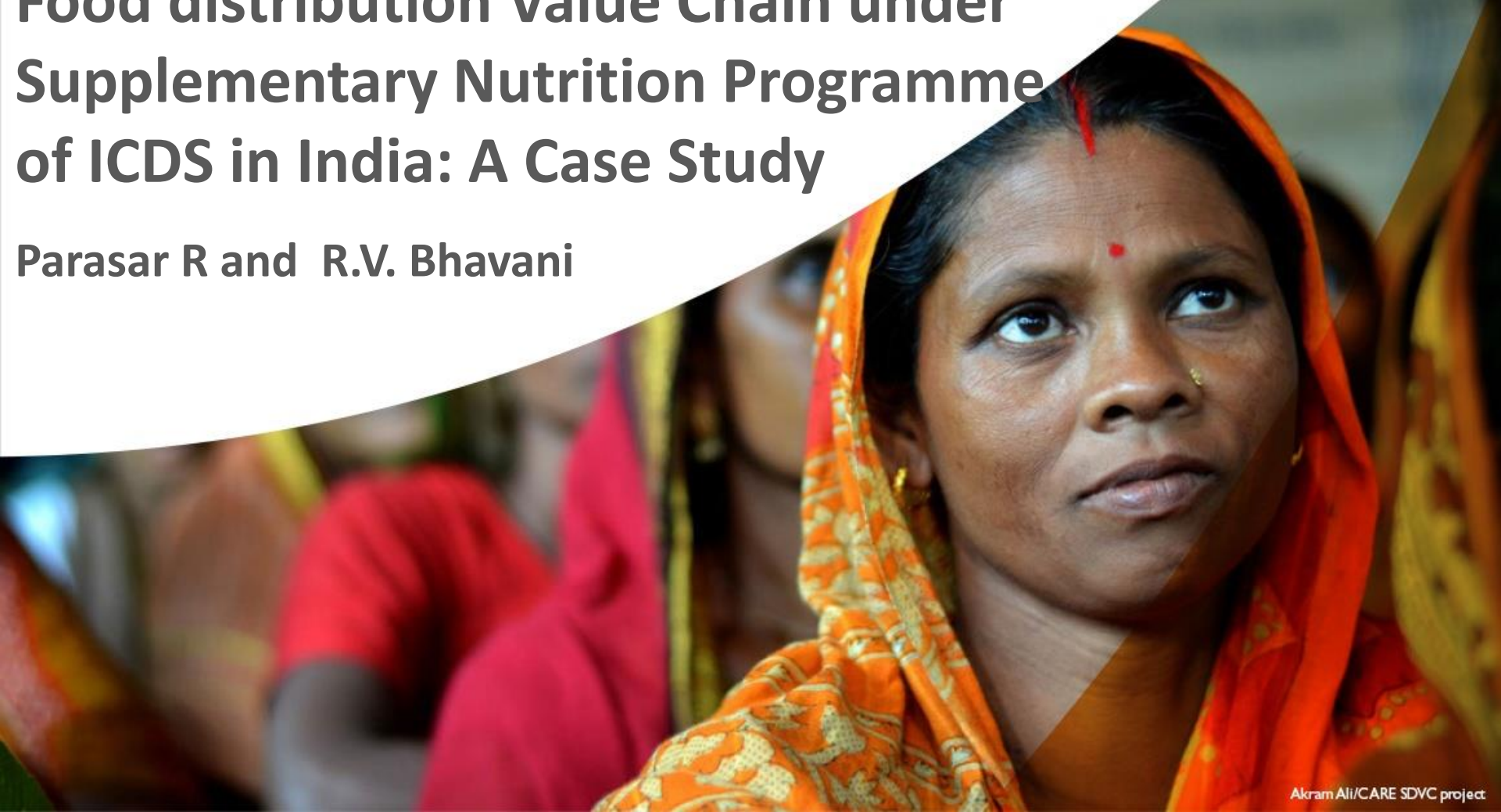
LANSA

Leveraging Agriculture for
Nutrition in South Asia



Food distribution Value Chain under Supplementary Nutrition Programme of ICDS in India: A Case Study

Parasar R and R.V. Bhavani



Context



- Access to safe nutritious food-17 SDG
- High rate of Under-nutrition: biggest challenge
- “The food and agriculture sector offers key solutions for development, and is central for hunger and poverty eradication”- SDG 2
- Nutrition sensitive agri-food value chains have a important to play



Why Value Chain Approach



- Dependency on Non-home Production/Markets



Why Value Chain Approach



- Dependency on Non-home Production/Markets
- Impact beyond farm-gate



Why Value Chain Approach



- Dependency on Non-home Production/Markets
- Impact beyond farm-gate
- Higher value and exclusion of poor as consumer



Why Value Chain Approach



- Dependency on Non-home Production/Markets
- Impact beyond farm-gate
- Higher value and exclusion of poor as consumer
- Hence value chain analysis of targeted public food distribution is important.



Why Value Chain Approach



- Dependency on Non-home Production/Markets
- Impact beyond farm-gate
- Higher value and exclusion of poor as consumer
- Hence value chain analysis of targeted public food distribution is important.
- We chose to study Supplementary Nutrition Programme (SNP) under the Integrated Child Development Services (ICDS) in Two Indian States Telangana and TN.



ICDS and Supplementary Nutrition Programme



- ICDS: National level social protection initiative targeting pregnant and lactating women, adolescent girls and 0-6 years children



ICDS and Supplementary Nutrition Programme

- ICDS: National level social protection initiative targeting pregnant and lactating women, adolescent girls and 0-6 years children

Target Group	Cost/beneficiary/day	Calories (K Cal)	Protein (g)
(i) Children	9 Cents (Rs.6.00)	500	12-15
(ii) Severely Underweight children	13 Cents (Rs.9.00)	800	20-25
(iii) Pregnant and Lactating women	10 Cents (Rs.7.00)	600	18-20

*1USD= Rs 66.7



ICDS and Supplementary Nutrition Programme

- ICDS: National level social protection initiative targeting pregnant and lactating women, adolescent girls and 0-6 years children

Target Group	Cost/beneficiary/day	Calories (K Cal)	Protein (g)
(i) Children	9 Cents (Rs.6.00)	500	12-15
(ii) Severely Underweight children	13 Cents (Rs.9.00)	800	20-25
(iii) Pregnant and Lactating women	10 Cents (Rs.7.00)	600	18-20

*1USD= Rs 66.7

- Tamil Nadu: 54439 ICDS/Anganwadi Centres, 2.1 Million Children and 700,000 Women
- Telangana: 35700 ICDS/Anganwadi Centres, 1.6 Million Children and 500,000 Women



Food Provided under SNP



Women:

- Telangana: One full meal for pregnant and lactating women including 200ml milk.
- Tamil Nadu: Pregnant and lactating women are provided Nutritious Pre-mix (THR) every week to consume 160 grams of pre-mix per day



Food Provided under SNP



Women:

- Telangana: One full meal for pregnant and lactating women including 200ml milk.
- Tamil Nadu: Pregnant and lactating women are provided Nutritious Pre-mix (THR) every week to consume 160 grams of pre-mix per day

Children:

- Younger children (less 3 years): Eggs and Nutritious Premix (THR)

Tamil Nadu: Provision of Noon Meal for 2-3 year

- Older children (3-6 years): Noon Meal (Spot feeding)

Telangana: Extruded snacks



Anganwadi Centre



Anganwadi Kitchen



Helper serving food to children



Women at centre

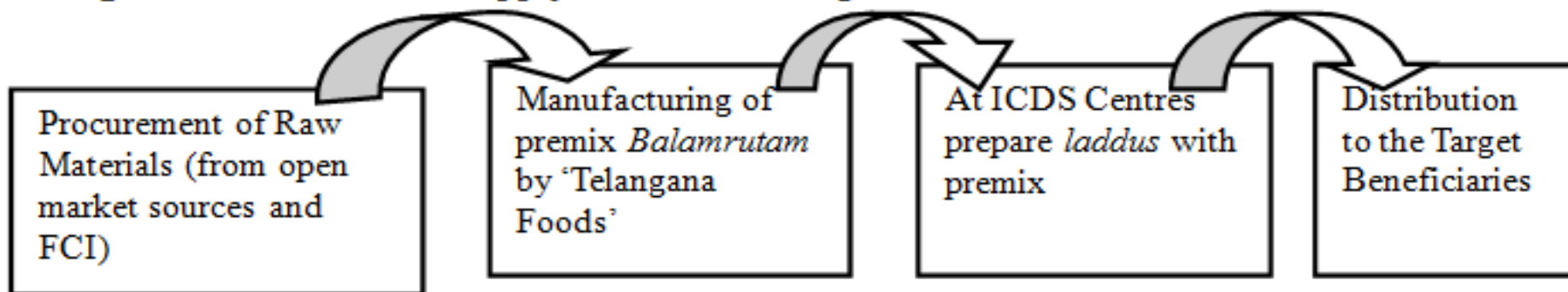


Children at Anganwadi Centre



Value Chain in Telangana

Figure1: Premix Food Supply Chain in Telangana

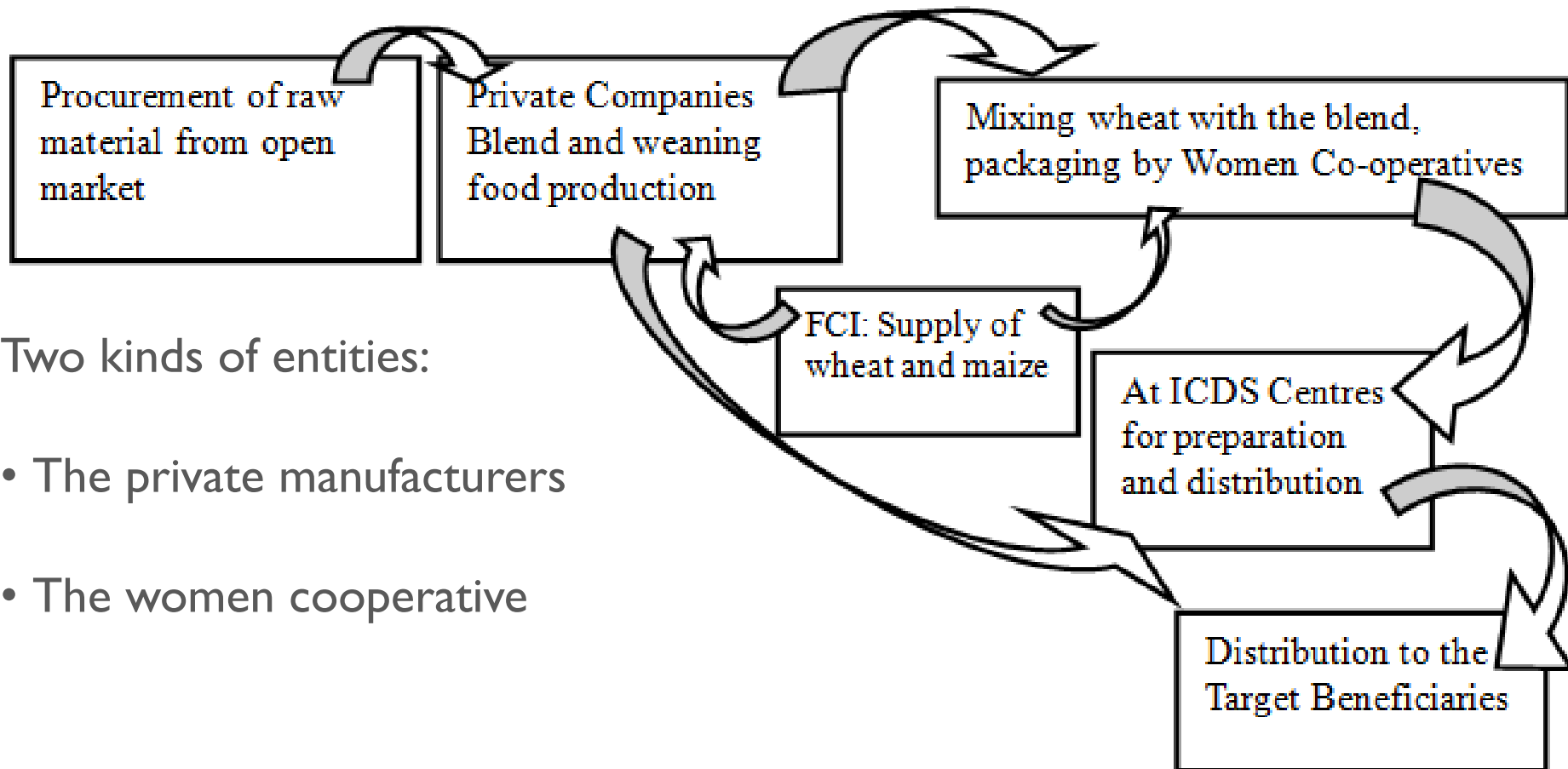


- State Govt. Enterprise
- Under Utilisation of Capacity



Value Chain in Tamil Nadu

Figure 2: Premix Food Supply Chain in Tamil Nadu



Value Chain in Tamil Nadu

- Competitive bidding for private manufacturers.
- The private player link in the value chain is about a decade old. Before that all processes were undertaken by the Women cooperatives.
- The new arrangement has enhanced the production



State Commitment



- Both Tamil Nadu and Telangana are allocating more resources than the Govt. of India recommendation.



State Commitment

- Both Tamil Nadu and Telangana are allocating more resources than the Govt. of India recommendation.
- The amount however accounts for only a small proportion of the state GDP

Cost to state of providing hot cooked meal to women

State	No. Of Women	Cost per head per day in Rs	Percentage of State GDP
Telangana	5,18,215	21 (0.33 USD)	0.101
Tamil Nadu*	6,88,683	21 (0.33 USD)	0.062

*hypothetical; (There is however the question of women being able to come on regular basis and hence the debate between spot feeding and Take Home Ration



State Commitment

- Both Tamil Nadu and Telangana are allocating more resources than the Govt. of India recommendation.
- The amount however accounts for only a small proportion of the state GDP

Cost to state of providing hot cooked meal to women

State	No. Of Women	Cost per head per day in Rs	Percentage of State GDP
Telangana	5,18,215	21 (0.33 USD)	0.101
Tamil Nadu*	6,88,683	21 (0.33 USD)	0.062

*hypothetical; (There is however the question of women being able to come on regular basis and hence the debate between spot feeding and Take Home Ration)

Willingness of the State to spend is an important factor for impact



Impact

Prevalence of Underweight	Coef.	P>t	
<i>Per Capita expenditure on SNP FY13 (in Rs)</i>	-0.004	0.03	
<i>Percent of Children Fully Immunised</i>	-0.177	0.156	R-squared = 0.2042
<i>Constant</i>	42.8	0	Number of States = 27

Using estimate of Rapid Survey on Children (2014) we find there is a negative association of prevalence of under-nutrition with additional per head cost .

State that spends more on the beneficiaries under SNP has lesser number of undernourished children.



Overall Assessment



- Link between agricultural production and nutritional outcome
- **Consumer Perspective:** Nutritional Awareness, Credibility, Acceptability, Availability, and Affordability



Overall Assessment



- Link between agricultural production and nutritional outcome
- **Consumer Perspective:** Nutritional Awareness, Credibility, Acceptability, Availability, and Affordability



Overall Assessment

- Link between agricultural production and nutritional outcome
- **Consumer Perspective:** Nutritional Awareness, Credibility, Acceptability, Availability, and Affordability
- **Producer Perspective:** Creating Value, Incentives along the Value Chain, Coordination, and Managing Risk and Uncertainty



Overall Assessment

- Link between agricultural production and nutritional outcome
- **Consumer Perspective:** Nutritional Awareness, Credibility, Acceptability, Availability, and Affordability
- **Producer Perspective:** Creating Value, Incentives along the Value Chain, Coordination, and Managing Risk and Uncertainty



Overall Assessment

- **Gender:** Beneficiary, Agency and Contradictions
- **Food Safety:**
 - On-spot feeding
 - Quality Standard for Pre-mix
 - Packaging
- **Fulfilment of Nutritional Requirements:**



Differences in the two Value Chains



➤ **Reach**



Differences in the two Value Chains

- **Reach**
- **Implication on Public Resources: Underutilised capacity in Telangana**



Differences in the two Value Chains

- **Reach**
- **Implication on Public Resources:** Underutilised capacity in Telangana
- **State's level of Economic Development**



Differences in the two Value Chains

- **Reach**
- **Implication on Public Resources:** Underutilised capacity in Telangana
- **State's level of Economic Development**
- **Women Cooperatives for Social Welfare**



Differences in the two Value Chains

- **Reach**
- **Implication on Public Resources:** Underutilised capacity in Telangana
- **State's level of Economic Development**
- **Women Cooperatives for Social Welfare**
- **Importance of mixed value chain:** What changed with private players in the chain?



Thank you !!

