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Presentation on

Economic Impact of MGNREGA: Social Accounting Matrix Analysis in Markabbinahalli Village of Karnataka

By

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MGNREGS

Enhancing livelihood security of households in rural areas

Providing 100 days of guaranteed wage employment in a financial year

Creating durable assets with lasting effects

Having a multiplier effect on different sectors of village economy

Present Study

By the Department of Agricultural Economics, UAS, Bangalore

In partnership with ICRISAT, Hyderabad

To assess the economic impact of MGNREGS in a ICRISAT - VDSA village in north Karnataka

Objectives of the study

• To develop and validate Village level Social Accounting Matrix (SAM)

• Quantification of multiplier effects of MGNREGA and derivation of economic effects of the MGNREGA interventions

• Derive alternate policy measures and/or government interventions for enhancing welfare of the village economy

Study Area

Markabbinahalli village of Basavana Bagevadi taluka of Bijapur district in Karnataka

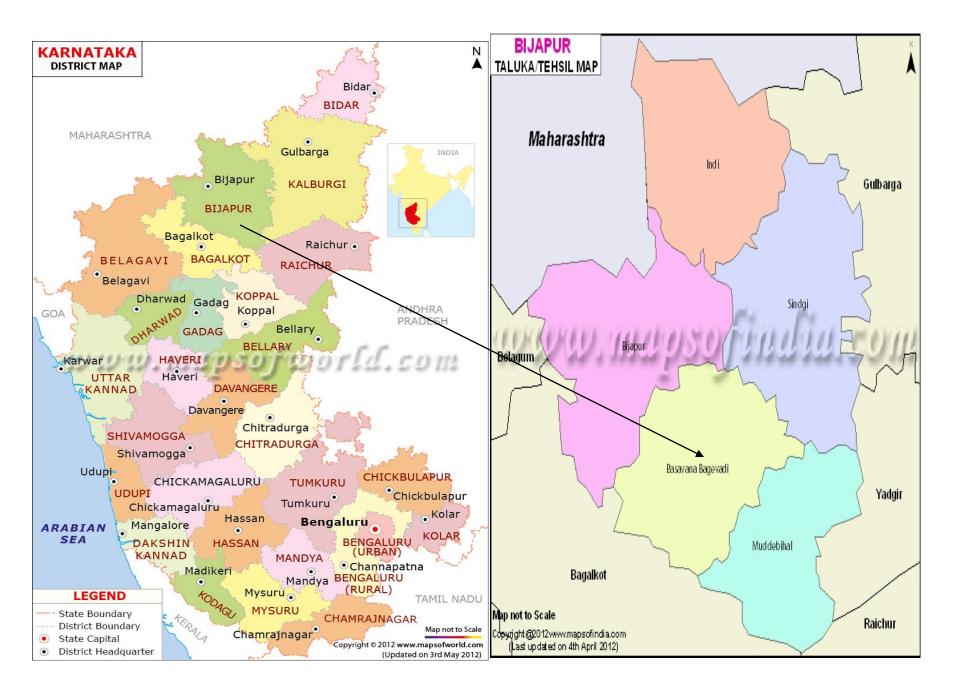
A completely dry farming village with no bore well / dug well irrigation since the ground water is saline

ICRISAT has adopted this village for conducting its VDSA (village Dynamics in South Asia) study

Location of selected district (Bijapur) in Karnataka









Employed social accounting matrix analysis tool

A SAM of 82X82 size was constructed

Data Collection

Primary data

Table 1: VDSA Households Classification in Markabbinahalli

| Category | Land classification* | No. of Households in the village ** |
|----------|----------------------|---|
| Landless | <0.1 ha | 110 |
| Marginal | 0.1 ha - < 1 ha | 43 |
| Small | 1 ha - < 2 ha | 89 |
| Medium | 2 ha- < 4 ha | 86 |
| Large | > 4 ha | 72 |
| Total | | 400 |

Source: *Markabbinahalli Village at a Glance (2010) published by ICRISAT. ** Markabbinahalli Gram Panchayat records

Data Collection ... contd.

- Primary data ... contd.
- From different economic agents
- Shops (Agricultural input shop, canteen, Provision store)
- Service providers (tailor, barber, drivers, labourers and so on)
- Regarding details of employment provided, receipts and expenditure

Data Collection ... contd.

- Secondary data
- From Government institutions (Gram Panchayat, Anganwadi Centre, School, Post Office, Health Care Centre, financial institutions located in Devarhippargi & Satihal and ICRISAT VDSA database)
- Official websites <u>http://nrega.nic.in/netnrega</u> and <u>http://panchamitra.kar.nic.in</u>
- Structured questionnaire were used to collect information on the transaction both within and outside and were recorded separately and source wise

Results

Table 2 Aggregated Social Accounting Matrix for MarkabbinahalliVillage for 2012-13(values in Rs. lakhs)

| | ACTIVITY | | | COMMODITY | | | | | | |
|---------|----------|------|-------|-----------|-------|-------|------|-------|-------|-------|
| | AGRI | CHAR | NREGP | TRD | OTH | AGRI | CHAR | NREGP | TRD | OTH |
| AGRI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 342.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| CHAR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.3 | 0.0 | 0.0 | 0.0 |
| NREGP | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.0 | 0.0 | 0.0 |
| TRD | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 174.2 | 0.0 |
| OTH | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 265.4 |
| AGRI | 11.0 | 0.0 | 0.0 | 72.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| CHAR | 0.0 | 0.0 | 0.0 | 8.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| NREGP | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TRD | 20.1 | 0.0 | 0.0 | 5.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| OTH | 29.2 | 0.0 | 0.0 | 2.2 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| LABOUR | 86.8 | 9.2 | 4.2 | 4.2 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| CAPITAL | 36.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| HOUSE | 81.9 | 9.2 | 0.0 | 42.3 | 135.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| INST | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| S&I | 58.5 | 0.0 | 0.0 | 0.0 | 2.6 | 11.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ROW | 18.7 | 0.0 | 10.8 | 40.1 | 123.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOTAL | 342.4 | 18.3 | 15.0 | 174.2 | 265.4 | 353.3 | 18.3 | 15.0 | 174.2 | 265.4 |

Table 2 Aggregated Social Accounting Matrix for MarkabbinahalliVillage for 2012-13(values in Rs. lakhs) ... contd.

| | FACTOR SERVICES | | | | C D T | | |
|---------|-----------------|---------|-------|------|----------------|-------|--|
| | LABOUR | CAPITAL | HOUSE | INST | S&I | ROW | |
| AGRI | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| CHAR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| NREGP | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| TRD | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| OTH | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| AGRI | 0.0 | 0.0 | 34.0 | 0.0 | 0.0 | 236.0 | |
| CHAR | 0.0 | 0.0 | 10.1 | 0.0 | 0.0 | 0.0 | |
| NREGP | 0.0 | 0.0 | 0.0 | 0.0 | 15.0 | 0.0 | |
| TRD | 0.0 | 0.0 | 14.5 | 0.0 | 5.0 | 129.4 | |
| OTH | 0.0 | 34.2 | 101.7 | 0.0 | 0.4 | 97.1 | |
| LABOUR | 0.0 | 0.0 | 10.4 | 3.6 | 0.0 | 52.1 | |
| CAPITAL | 0.0 | 0.0 | 47.5 | 0.0 | 0.0 | 0.0 | |
| HOUSE | 167.8 | 0.0 | 48.0 | 46.9 | 60.4 | 27.0 | |
| INST | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 65.1 | |
| S&I | 0.0 | 2.1 | 117.0 | 15.1 | 0.0 | 0.0 | |
| ROW | 5.0 | 47.5 | 235.9 | 0.1 | 125.3 | 0.0 | |
| Total | 172.8 | 83.9 | 619.1 | 65.6 | 206.2 | 606.7 | |

Where AGRI.: Agriculture, CHAR: Charcoal, TRD: Trade (includes both Agro-input and commodity), OTH: Other service providers, HOUSE: Households, INSTI: Institutions (Panchayat and Temple), S& I: Savings and Investment, ROW: Rest of the World

Table 3 Impact of Rs. 10 lakh additional investment in MGNREGSon Markabbinahalli village Economy (A simulation)

| Particulars | Multiplier Effect | Impact for Rs. 10 lakh (Rs.) | Base Value for Agriculture Year 2012- 13 (Rs.) | Percentage Impact |
|-------------------------------|-------------------|---------------------------------|--|-------------------|
| Hired labour services | 0.2884 | 2,88,438 | 98,75,531 | 2.92 |
| Small family households | 0.0950 | 95,019 | 92,88,363 | 1.02 |
| Landless family households | 0.1071 | 1,07,097 | 1,12,82,571 | 0.95 |
| Repair and maintenance shop | 0.0006 | 633 | 72,000 | 0.88 |
| PDS shop | 0.0073 | 7,277 | 9,07,825 | 0.80 |
| Private School | 0.0040 | 4,021 | 5,20,028 | 0.77 |
| Provision store | 0.0370 | 37,015 | 50,31,080 | 0.74 |
| Doctor | 0.0068 | 6,795 | 9,22,101 | 0.74 |
| Barber | 0.0012 | 1,192 | 1,64,250 | 0.73 |
| Grinding mill | 0.0023 | 2,294 | 3,16,240 | 0.73 |
| Canteen | 0.0051 | 5,108 | 7,05,050 | 0.72 |
| Others commodity trade | 0.0103 | 10,314 | 14,65,594 | 0.70 |
| Gold smith | 0.0002 | 226 | 32,600 | 0.69 |
| Tailor | 0.0042 | 4,192 | 6,13,825 | 0.68 |
| Marginal family households | 0.0696 | 69,632 | 1,04,40,276 | 0.67 |
| Medium family households | 0.0568 | 56,790 | 1,06,52,084 | 0.53 |

Table 3 Impact of Rs. 10 lakh additional investment in MGNREGSon Markabbinahalli village Economy (A simulation) ... contd.

| Particulars | Multiplier Effect | Impact for Rs. 10 lakh (Rs.) | Base Value for Agriculture Year 2012- 13 (Rs.) | Percentage Impact |
|----------------------------|-------------------|---------------------------------|--|-------------------|
| Charcoal making | 0.0078 | 7,781 | 18,29,654 | 0.43 |
| Black smith | 0.0016 | 1,632 | 3,91,902 | 0.42 |
| Jowar commodity | 0.0103 | 10,332 | 25,69,774 | 0.40 |
| Machinery hired out | 0.0109 | 10,885 | 31,28,018 | 0.35 |
| Capital services | 0.0292 | 29,178 | 83,84,979 | 0.35 |
| Temple | 1E-05 | 7 | 2,145 | 0.33 |
| Other commodity | 0.0116 | 11,622 | 38,31,617 | 0.30 |
| Large family households | 0.0597 | 59,690 | 2,02,44,151 | 0.29 |
| Post office | 0.0042 | 4,184 | 16,81,297 | 0.25 |
| Family labour services | 0.0099 | 9,938 | 74,00,994 | 0.13 |
| Cobbler | 0.0002 | 216 | 1,82,400 | 0.12 |
| Wheat commodity | 0.0027 | 2,646 | 25,22,986 | 0.10 |
| Transport service provider | 0.0055 | 5,490 | 88,91,502 | 0.06 |
| Pigeon pea commodity | 0.0026 | 2,555 | 88,80,075 | 0.03 |
| Chickpea commodity | 0.0022 | 2,232 | 83,25,896 | 0.03 |
| Agri-inputs trade | 0.0011 | 1,055 | 35,14,000 | 0.03 |
| Total | 1.8555 | 18,55,486 | 16,90,99,228 | 1.10 |

Table 4: Summary of impact of Rs. 10 lakh additional Investment inMGNREGS on Markabbinahalli Village Economy

| | Base Value for Agriculture | Multiplier | Impact of Investment in MGNREGS | | |
|--------------------------------|-------------------------------|------------|------------------------------------|----------|--|
| Particulars | Year 2012-13 (Rs.) | value | Rs. | % change | |
| Output Multiplier | 8,15,28,134 | 1.14 | 11,39,000 | 1.40 | |
| Employment Multiplier | 6,19,07,445 | 0.30 | 2,98,000 | 0.48 | |
| Household Income Multiplier | 1,72,76,525 | 0.39 | 3,88,000 | 2.25 | |

Reasons for low impact of MGNREGS

- Small scale ... Total outlay of Rs. 15 lakhs (2012-13)
- Proportion of labour component ... 28 percent as against 60 percent mandated (Rs. 4.2 lakhs, 2.43 % labour income)
- Weak linkages with other accounts ... Material components were procured from outside the village

Reasons for low impact of MGNREGS ... contd.

- Agricultural wage rate ... Rs. 300 per day Non-farm wage rate ... Rs. 350 per day MGNREGA wage rate of Rs. 174 per day
- On an average, in a year, a family worked for ...
- 27 days under MGNREGS
- 80 days in non-farm activities
- 253 days in agriculture
- Total family income was Rs. 1, 08,598
- Income from MGNREGS was Rs. 4698 (4.32 percent)
- Village workers not attracted to MGNREGS works

Reasons for low impact of MGNREGS ... contd.

Income flow into the village economy from temporary labour migration ... Rs. 52.1 lakhs

... 13 times that of labour earnings from MGNREGS

Local people and local leaders were not showing zeal

Operation of backward bending supply curve theory of labor

Summary and Policy Implications

- For MGNREGS to have stronger inter linkages with other sectors of the village economy
- Panchayat office bearers and members provide good leadership
- Improved governance with respect to programme implementation
- Use MGNREGS labour for executing works on individual farms

Summary and Policy Implications ... contd.

Selection of works to address issues related to creating better amenities, improving quality of life and increasing farm productivity

Works ... Better sanitation, rain water harvesting, tree planting, supply of good drinking water, rural connectivity, rejuvenation of traditional water bodies and land improvement on individual farms

Good quality in work execution

Financial transparency

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Desiltation of village tank under MGNREGA in Markabbinahalli



Drainage work under MGNREGA in Markabbinhalli



Public toilet constructed under MGNREGA in Markabbinhalli



Thank You