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**Mapping welfare and development programmes with SDGs in
Indian village**

by Ch Radhika Rani, Abhipsita Das, A. Amarender Reddy, C. Papi Reddy,
and Anjani Vajrala Sneha

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Mapping welfare and development programmes with SDGs in Indian village

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Abstract

The paper examined the various development and social welfare schemes implemented in a village in India and mapping them to the Sustainable Development Goals (SDGs) to see whether these schemes are helping in achieve the SDG goals. This paper examines the actual benefits accrued to the households in a village and how they have utilized the schemes. The paper assessed share of households benefited and the extent of benefit from each scheme and also at the aggregate level. The research is conducted in Emped village of Telangana state of India by collecting information from all 287 households to get a holistic picture in year 2017. Although more than 50 schemes were implemented in the village, about 29 were active. The study examines 29 schemes from which, at least one household got benefited. The average aggregate benefit from all government schemes is about Rupees 58,095 per household. Some schemes benefit large farmers and pro-rich, while others were pro-poor. Majority of the households benefited from schemes like the Public Distribution System (PDS), direct benefit transfer based on agricultural land, MGNREGA, loan waiver, seed and fertilizer subsidy, mid-day-meal scheme but only a modest amount. But very few are benefited from the double-bed room housing scheme, the Chief Minister Relief Fund in huge sums. Schemes addressed to women like the KCR Kits (assistance to pregnant women) and Shadi Mubarak(marriage assistance) were effective. Overall, these schemes help to achieve different targets of the SDGs but need more focus on identification of target beneficiary, reduction of leakages and inordinate delays in implementation. Overall, there is inverted U shape relationship exists between household income and total benefits received, while a positive relationship exists between landholding and benefits from the government schemes. Most of the assistance received from agricultural development schemes are spent on intended purpose, whereas welfare schemes was spent on consumption purpose.

JEL Classification: D6- Equity, Inequality, H44-Publicly Provided Goods, H53-Government Expenditures and Welfare Programs, H75-State and Local Government, I38-Government Policy and Welfare Programs

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Mapping welfare and development programmes with SDGs in Indian village

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1. Introduction

Different central, state and local government development and welfare schemes have to be aligned to Sustainable Development Goals (SDGs) to achieve the SDG targets. It is a gigantic task to monitor convergence of all schemes at the household level to achieve the SDG goals. There is scant literature available on mapping SDGs with ongoing development and welfare schemes (Reddy, 2017; Reddy et al., 2016). Though, there is some literature available on mapping government schemes to SDG targets at national level, there is no literature available at household level (Sachs, 2012; Richter et al., 2017; Lu et al, 2015; Tangcharoensathien, et al., 2015; Stafford-Smith et al., 2017; Griggs et al., 2013; Nomani et al., 2017). The actual implementation of all government schemes needs integration at the household level. This paper fills this important literature gap by taking a case study of a village in Telangana state, India. At the village level, implementation of most of the schemes of central, state and local schemes converge, because most of the schemes are supervised/overseen by the *gram sabha* in general and village panchayat in particular. The government of India also emphasizes on the convergence of all schemes at village level to achieve SDG goals.

2. Objectives

The objective of the paper is to enlist of the schemes (both central, state government schemes) functional at the village level that directly benefit the village households and measure the extent of benefits accrued to each household in terms of SDG goals by selecting one village which represents socio-economic conditions of India.

Specific objectives

- i. Examine the various development and welfare schemes going on in a village
- ii. To assess the extent of benefits from different schemes by households and mapping the benefits to SDG goals.
- iii. Whether utilization of the benefits are for intended use or not?

3. Methodology and sampling framework

The study has been conducted in Emped village of Telangana state in India with 287 households. List of all the households has been taken from the village revenue officer. Focus group discussions were conducted among men, women, scheduled caste, scheduled tribe and other groups to enlist all the schemes implemented in the village by the government machinery during 2017. The list has been cross-checked by village

panchayat, village revenue officer (landholding records, free passbook), mandal agricultural officer (different agricultural schemes), Aasha worker (health schemes), Anganwadi (women and child development schemes), village school teachers(education related and others) and other related administrative staff. The study team shortlisted 29 schemes out of 55 schemes implemented by government machinery which benefited at least one household in the village in ear 2017. The details about the selected schemes are attached in Annexure-1. After the final selection of the list of schemes, the survey has been conducted in a census basis covering entire 287 households in the village.

Measurement of benefits

The schemes have been divided into (i) schemes with 100% freely provided: Old age pension schemes, soil health card scheme (with actual money transfer or actual cost involved has been taken as benefit accrued to households), (ii) schemes with subsidy components like; fertilizers, RKVY (with only subsidy component has been considered to assess the benefit to households), Public Distribution System (subsidy amount was calculated by using the formulae $\{(market\ price - subsidized\ price) \times quantity\}$, (iv) other services/ benefits like LPG gas cylinder, the actual amount of direct money transfer was taken for calculation of benefits, (v) other schemes for which secondary information is not available, the benefits have been calculated as per the discussion with the implementing agencies and key informants. Then each scheme is mapped to a specific SGD based on the nature of major benefits accrued by the scheme (for example SHC is included in SDG-2 zero hunger relating to sustainable agriculture; whereas mid-day meal scheme is included in education, although it also aims to reduce hunger and malnutrition as the basic purpose of this scheme is ensuring attendance in the school). Most of the scheme are falling in agriculture, education and health improvements.

Overall, the apportioning of schemes among the different SDGs is given in table 1. Majority of the schemes fall under SDG-2 as most of the direct and indirect support goes to the agricultural sector. Wherever possible t-tests were applied to assess the significant differences among groups.

Table 1. Mapping SDGs with development and welfare schemes

SDGs	Schemes
SDG-1: End poverty in all its forms	MGNREGA
SDG-2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	Fee passbook, Rs. 4000 input subsidy National Horticulture Mission Rashtriya Krishi Vikas Yojana(RKVY) Seed Subsidy Fertilizer subsidy Crop Loan Waiver scheme Public Distribution System(PDS) for the supply of rice at 2@kg

	<p>National Food Security Mission(NFSM) Prime Minister Fasal Bima Yojana(PMFBY) for crop insurance Pradhan Mantri Krishi Sinchayee Yojana(PMKSJ) for irrigation Mission Kakatiya for rejuvenating tanks Paramparagath Krishi Vikas Yojana (PKVY) for organic Agril. Subsidy for Buying Buffalo Distribution of sheep on subsidy</p>
SDG-3: Ensure healthy lives and promote wellbeing	National Rural Health Mission, Aarogyasri, KCR Kits, Integrated Child Development Services (ICDS)
SDG-4: Ensure inclusive and equitable education	Mid-Day Meal Scheme, Fees Reimbursement for education
SDG-5: Achieve gender equality and empower women and girls	Kalyana Lakshmi/Shadi Mubarak, Pension Scheme for single women,
SDG-6: Ensure availability and sustainable management of water and sanitation for all	Swachabharath, Water Harvest structures(rainwater harvest structures), Mission Bhagiratha for drinking water
SDG-7: Ensure access to affordable, reliable, sustainable, modern energy for all	24-hour free electricity for agriculture, CNG Gas Subsidy for cooking
SDG-10: Reduce inequality within and among countries	Aasara Pensions(old age pension)
SDG-11: Make cities and human settlements inclusive, safe, resilient, and sustainable	Indira Awas Yojana (IAY), Double-bed room housing scheme, CM relief fund



Map 1a:India map indicating Telangana state; 1b:Telangana state indicating Jayashankar Bhupalapally district; 1c: Jayashankar Bhupalapally district indicating Chityal mandal; (1d) Emped village google map, bordered with red lines.

4. Results

4.1 Description of the study area

Emped village is located in *Jayashankar Bhupalapally* district of Telangana state in India with 287 households (Map 1). Agriculture is the main occupation of the villagers (Table 2). About 57% of the households belong to the OBCs community, 29% are SCs, 9% are FCs and the remaining 5% are STs out of the total households. About 34% are landless labourer, 44% are small farmers, 20% are medium farmers and only 2% are large farmers. 60% of the population are

farming as main occupation, while 20% of the population are agricultural labourers. The main crops grown in the village are Paddy and Cotton. Paddy is mainly sold at MSP in procurement centres while other crops including cotton are sold generally in the APMC market. The farmers purchase paddy seeds from the agriculture department and cotton seeds from the market. About 39% farmers were having bore wells for agricultural activities. The average annual income of the households is Rs. 60,600 per annum. Majority of farmers have Patta Passbooks. About 94.1% households were having ration cards, 95.1% households have bank accounts. There is less awareness about the premium that is been charged under PMFBY(crop insurance scheme), 45% of the farmers pay a premium for the PMFBY but, none of them has been benefited.

Table 2: Demographic details of the village's households by caste status

Category/group	Indicator	% of households
	Literate	46.0
Occupation	Agriculture	58.2
	Agriculture Labour	20.9
	Non-farm workers	20.9
	Tenant farmer	21.6
Land holding	Small landholders (<2 acre)	67.0
	Medium landholders (2-7 acre)	29.7
	Large landholders(> 8 acre)	3.3
	Average farm size(acre)	2.14
Social group	OBCs	57.5
	FCs	8.7
	SCs	28.9
	STs	4.9
Participation in schemes	Having Aadhar card	98.3
	Having ration card	94.1
	Having bank account	95.1
	Having MGNREGA card	85.7
	Life insurance policy	19.2
	Premium paid for crop insurance	45.0
Others	Having vehicle	24.7
	Kutcha house	27.5
	Pucca house	72.5
	Borewells (agriculture)	39.0
	average annual income (Rs.1000)	73.3
	Family size (number)	3.0

Source: Filed survey,2017

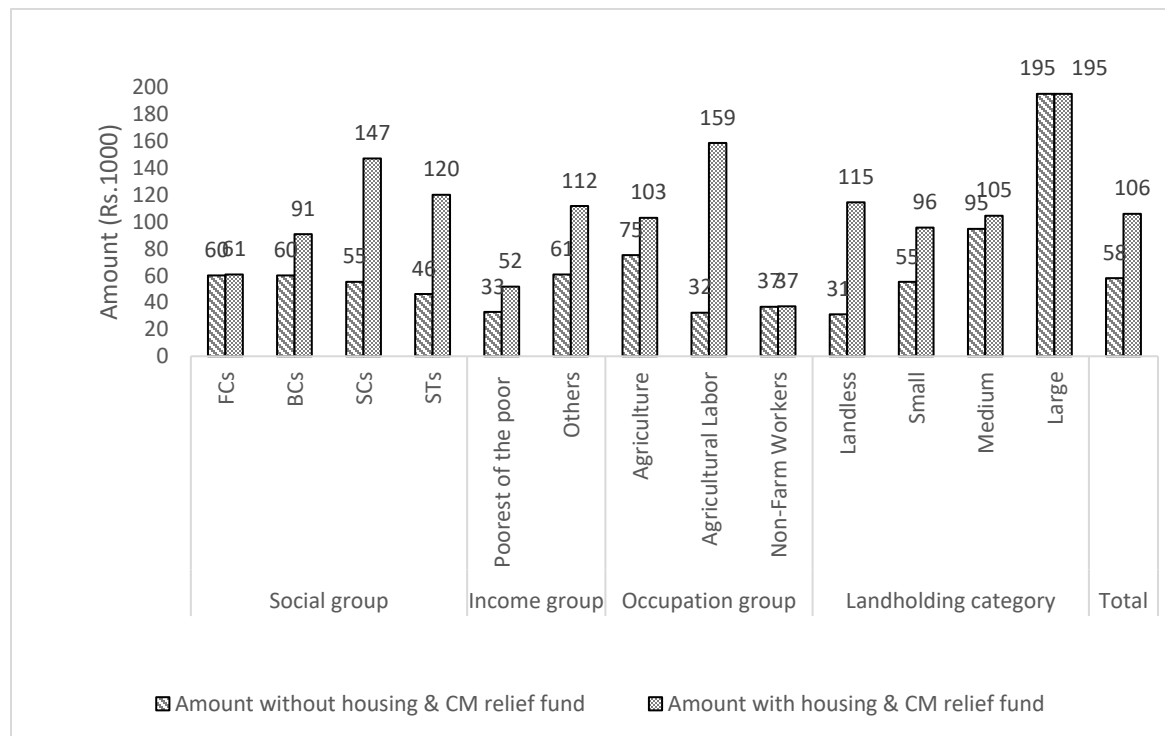
Average family size in the village is only 3, In the workers' category, about 58.2% are work as cultivators, 20.9% work as an agricultural labourer and 20.9% work as non-farm workers. The average landholding is only 2.14 acre in which the FCs holds around 3.89 acres which is higher compared to another caste, followed by BCs (2.31 acre), SCs (1.38 acre) and STs (2.0 acre). Irrigated land holdings are also more in the FCs and lesser in the STs. Annual household income is lower in the village compared to both state and national average indicating backwardness of the village. The average income is Rs. 73,345 with highest among FCs (Rs.1,05,304) followed by BCs(Rs.72,454), SCs(Rs.67,470), and STs (Rs.64,508).

4.2 Aggregate benefits to a different class and social groups

In general aggregate, benefits are higher among FCs and OBCs followed by SCs and STs without considering housing scheme and CM relief fund (Figure 1). The double-bed room scheme is high ticket scheme targeted to weaker sections mostly belongs to SCs and STs, which has few beneficiaries, while CM Relief Fund is given to only under special circumstances like accidents, calamity etc. If we include these two schemes, the aggregate benefits accrued to SCs and STs are much higher than that of FCs and BCs.

In general, the poorest of the poor get fewer benefits compared to not-so-poor households from the government schemes. Agricultural households get more aggregate benefits of Rupees 75,000 compared to agricultural labourers of Rs. 32,000 and non-farm workers of Rs.37,000 from the government schemes. If we include double-bed room and CM relief fund, then agricultural labourer gets more benefits than cultivators, but the non-farm workers get the least benefits. Benefits from government schemes have been increased with the increase in landholding size. The landless labourers got the only Rs.31,000, while the large farmers got Rs.1,95,000. If double-bed-room and CM relief fund is considered there is no significant difference among different land classes in aggregate benefits. It indicates that the double-bed-room and CM relief funds act as equalizers in filling the development assistance gap for the landless labourers and small landholding households.

Figure 1: Average amount of benefits accrued to different beneficiary groups under different schemes



Source: Filed survey, 2017

4.3 Scheme wise benefits

Out of 287 households in the village, PDS, gas subsidy, fertilizer subsidy, MGNREGA, 24-hour free electricity for agriculture, input support for farmers (Rs.4000 per acre per season), Aasara pensions (old age pensions), rainwater harvest structures, IAY and seed subsidy are more popular in the village and benefiting majority of the households (Table 3).

4.4 Distribution of benefits by social group

There is no significant difference among social groups in terms of a number of beneficiaries, except MGNREGA (benefiting STs more than FCs). Rs.4000 input support to farmers, crop loan waiver scheme were benefiting FC households more compared to other social groups. Beneficiaries under water harvest structures, IAY houses, and mid-day meal scheme are more among SC/ST households. SC households receive benefit more from fees reimbursement to students, double-bed room, horticultural schemes (National Horticultural Mission) and Kalyana Laxmi(marriage assistance). Some schemes like distribution of

sheep on subsidy, renovation of village ponds, National Food Security Scheme (NFSS) are not active at the moment.

Table 3: The average benefits received by households under different schemes by caste status in Rupees with its respective % beneficiary households in parenthesis

Schemes	FCs (25)	BCs (165)	SCs (83)	STs (14)	Average benefit (Rs.) for all households	Number of beneficiate households out of 287
PDS	2559 (80%)	2929 (84.2%)	2908 (72.3%)	3259 (85.7%)	2909 (80.5%)	231
Gas Subsidy	1578 (88.0%)	922 (67.9%)	1260 (72.3%)	986 (85.7%)	1095 (71.8%)	206
Fertilizer subsidy	23631 (60.0%)	17933 (65.5%)	10110 (66.3%)	17171 (50.0%)	16040 (64.5%)	185
MGNREGA	5991 (44.0%)	4395 (59.4%)	4936 (66.3%)	5269 (92.9%*)	4727 (61.7%)	177
24-hour electricity	687 (44.0%)	775 (53.9%)	854 (60.2%)	582 (42.9%)	787 (54.4%)	156
Rs. 4,000 Input Subsidy to Farmers	12433 (60.0%*)	9158 (46.7%)	6206 (43.4%)	4467 (42.9%)	8522 (46.7%)	134
Free passbook	6923 (52.0%*)	4563 (48.5%)	2731 (42.2%)	1800 (35.7%)	4208 (46.3%)	133
Swachabharath	12333 (24.0%)	12000 (37.0%)	12114 (42.2%)	12167 (42.9%)	12065 (37.6%)	108
Aasara Pensions	12462 (52.0%)	12118 (41.2%)	13364 (26.5%)	12000 (21.4%)	12415 (36.9%)	106
Water Harvest structures	3520 (20.0%)	3568 (27.9%)	3397 (40.9%*)	3750 (28.6%)	3508 (31.0%)	89
IAY	40000 (12.0%)	30043 (28.5%)	52800 (24.1%)	35000 (35.7%*)	36840 (26.1%)	75
Seed Subsidy	1807 (28.0%)	1568 (22.4%)	915 (15.7%)	1058 (42.9%)	1411 (22.0%)	63
Crop Loan Waiver Scheme	52500 (24.0%*)	39389 (10.9%)	33545 (13.3%)	16000 (7.1%)	39139 (12.5%)	36
Mid-Day Meal Scheme	0 (0%)	6571 (8.5%)	5333 (21.7%*)	7000 (14.3%)	5941 (11.9%)	34
Fees Reimbursement	0 (0%)	10808 (8.5%)	14864 (15.7%*)	0 (0%)	12748 (9.4%)	27
Double-bed room	504000 (0%)	504000 (6.1%)	504000 (18.1%*)	504000 (14.3%)	504000 (9.4%)	27
Aarogyasri	50000 (4.0%)	46071 (8.5%)	50000 (8.4%)	0 (0%)	47500 (7.7%)	22
ICDS	8250 (8.0%)	5728 (6.7%)	5900 (6.0%)	11400 (14.3%)	6590 (7.0%)	20
RKVY	1250 (4.0%)	113438* (4.9%)	1125 (2.4%)	1250 (7.1%)	76021 (4.2%)	12
NHM	5000 (4.0%)	3750 (1.2%)	2933 (7.2%)	0 (0%)	3344 (3.1%)	9
Distribution of KCR kits	0 (0%)	1350 (1.2%)	5300 (6.0%*)	6000 (7.1%*)	4400 (2.8%)	8

Kalyana Lakshmi/Shadi Mubarak	0 (0%)	56750 (2.4%)	50667 (3.6%)	0 (0%)	54143 (2.4%)	7
CM relief fund	18000 (4.0%)	13500 (1.8%)	29500 (2.4%)	25000 (7.1%)	20357 (2.4%)	7
Arogya Lakshmi	0 (0%)	12000 (1.2%)	12333 (3.6%)	0 (0%)	12200 (1.7%)	5
NFSM	0 (0%)	9221 (1.8%)	0 (0%)	0 (0%)	9221 (1.1%)	3
NRHM	0 (0%)	2000 (0.6%)	1000 (1.2%)	0 (0%)	1500 (0.7%)	2
Pension Scheme for single women	0 (0%)	0 (0%)	12000 (1.2%)	12000 (7.1%)	12000 (0.7%)	2
Mission Kakatiya	0 (0%)	3000 (0.6%)	0 (0%)	0 (0%)	3000 (0.4%)	1
Distribution of sheep on subsidy	0 (0%)	0 (0%)	80000 (1.2%)	0 (0%)	80000 (0.4%)	1

Note: *indicates significant differences in means at 5% level by using t-test; figures in parenthesis % beneficiaries in total households in each group; Source: Filed survey, 2017

Even though the farmers grow vegetables, plantation crops but there is an absence of the NHM in the village. There are also no beneficiaries under the Prime Minister Krishi Sinchai Yojana (PMKSY) for irrigation in the village. Though canal irrigation is a source of irrigation for some households, most of the farmers depend on bore wells and free-electricity as a source of irrigation. Majority of bore well farmers dug their wells by their personal investment, as they didn't receive any benefits from bore well subsidy. The farmers have been given pipelines subsidy, seed subsidies, tractors and tarpaulins under the NFSM scheme and the RKVY scheme. Almost 90% of village households are worked under MGNREGA in the off-season. About 90% of the agricultural households receive benefit from input and seed subsidy. Organic farming has not yet been introduced in the village, hence the villagers have not benefited the Paramparagath Krishi Vikas Yojana (PKVY) scheme. None of the villagers avails the benefits of the Soil Health card (SHC) scheme. Swachh Bharat Abhiyan has been successfully implemented in the village. The village has a continuous supply of electricity and water supply under Mission Bhagiratha. There is a connectivity problem in the village since the village is a remote area and transport facility is limited and under-developed (Table-3).

Some schemes like subsidy under double bedroom, distribution of sheep, farm implements under RKVY, marriage assistance (Kalyana Lakshmi), free health (Aarogyasree), crop loan waiver, the IAY involved high amount of subsidy more than Rs.3 to 5 lakh. Whereas, few groups of schemes like fertilizer subsidy, fees

reimbursement to students, old-age pensions, KCR-Kits(women health) and Swacha Bharath, involve government support between Rupees 10,000 to Rs20,000 per beneficiary. Some other group of schemes with low amount but benefit many are 24-hour free electricity for agriculture, gas subsidy, seed subsidy, PDS, water harvest structures, distribution of free passbook, benefit from working in MGNREGA, mid-day meal scheme, ICDS and Rs.4000 per acre input support for farmers of rupees, which benefit to the extent of Rs.10,000 per household (Table 3).

Table 4: Beneficiate households (%) covered under different schemes by income class of beneficiaries

Scheme	Poorest of the poor households (28)		Other households (259)	
	% of households benefited	Average of amount benefited (Rs.)	% of households benefited	Average of amount benefited (Rs.)
PDS	85.7*	1833	79.9	3033
Aasara Pensions	78.6*	11773	32.4	12583
Gas Subsidy	42.9	1705	74.9*	1057
Fertilizer subsidy	35.7	7056	67.6*	16554
MGNREGA	35.7	7460	64.48*	4563
Swachabharath	32.1	12111	38.2	12061
Water Harvest structures	32.1	3222	30.9	3540
CM relief fund	32.1	20357	30.9	19583
Seed Subsidy	21.4	1089	22.0	1445
24-hour electricity for agriculture	21.4	528	57.9*	797
IAY	17.9	29000	27.0	37400
Rs. 4,000 Input support to Farmers	14.3	9300	50.2*	8498
Aarogyasri	10.7	36667	7.3	49211
RKVY	7.1	1250	3.9	90975
Free passbook	7.1	1250	50.6*	4253
Crop Loan Waiver Scheme	3.6	10000	13.5*	39971
NHM	3.6	3000	3.1	3388
Mid-Day Meal Scheme	3.6	4000	12.7*	6000
NRHM	3.6	1000	0.4	2000
Fees Reimbursement	3.6	12000	10.0*	12782
Pension Scheme for single women	3.6	12000	0.4	12000
Double bed room	3.6	50400	10.0*	504000
NFSM	0.0	0	1.2	9221

Renovation of tanks	0.0	0	0.4	3000
Distribution of sheep on subsidy	0.0	0	0.4	80000
ICDS	0.0	0	7.7	6590
Distribution of KCR kits	0.0	0	3.1	4400
Arogya Lakshmi	0.0	0	1.9	12200
Kalyana Lakshmi/Shadi Mubarak	0.0	0	2.7	54143

Note: *indicates significant differences in means at 5% level; figures in parenthesis in the top row were a number of households in each group; Source: Filed survey, 2017

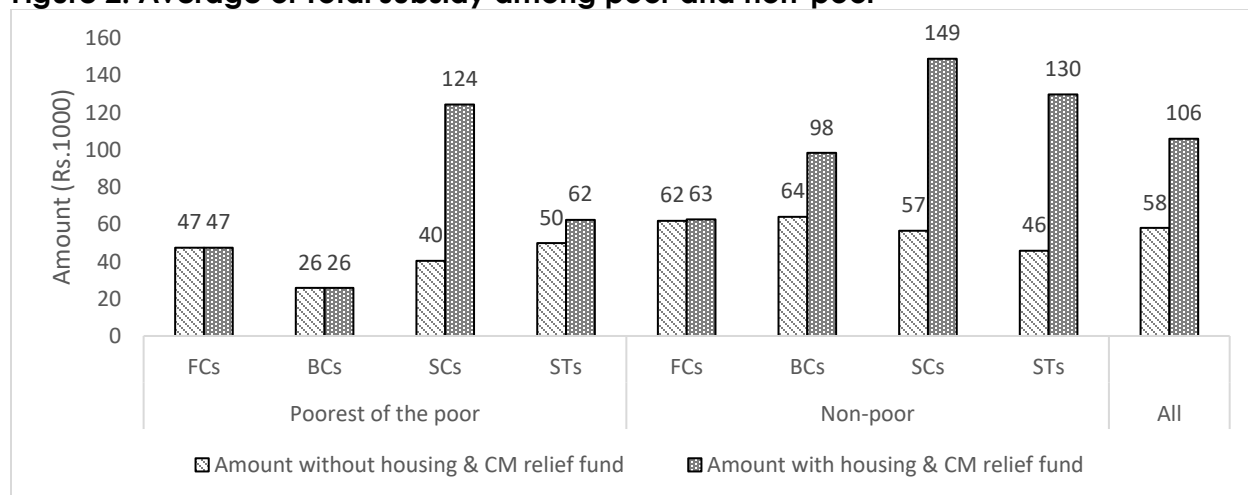
4.5 Benefits to the poorest of the poor

The effectiveness of any government welfare scheme is judged by the extent benefits reached to the poorest of the poor households. The poorest of the poor received more benefits only through PDS scheme of essential food items like rice, pulses and edible oils and old age pensions. They have been less benefited from most of the other schemes (Table 4). The fewer benefits from the government schemes might be due to the lack of physical assets like land and their disability to work under MGNREGA due to old age. Overall, the results show that most of the government schemes benefit the asset owned class as well as households with working-age population the most. There is a need for reorienting the schemes to avail the benefit by the poorest of the poor, by making them more accessible to the asset-less and old aged population.

4.6 Benefits received by different social groups among the poorest of the poor

Among the poorest of the poor, there is no much difference in the aggregate amount of benefits from different schemes between different social groups (without including double-bed-room housing scheme and CM relief fund), but if these two schemes are included, the poorest of the poor among the SC and the ST communities avail more benefits compared to the FC and the BC communities (Figure 2). Among not-so-poor, the FCs' and the BCs' enjoy more benefits compared to the SCs' and the STs' exclusive of the double-bed-room housing scheme and the CM relief fund, but with the inclusion of both these schemes, the STs' and the SCs' enjoy more benefits. It indicates that double-bed-room and the CM relief funds are pro-poor and has an active engagement for the development of the scheduled castes and tribes.

Figure 2: Average of Total subsidy among poor and non-poor



Source: Filed survey,2017

4.7 Benefits received by landholding class

There is a more significant difference in the benefits received by the farmers based on landholding size class which is exceptional in case of fertilizer subsidy, input support scheme, free passbook and the RKVY (Table 5).

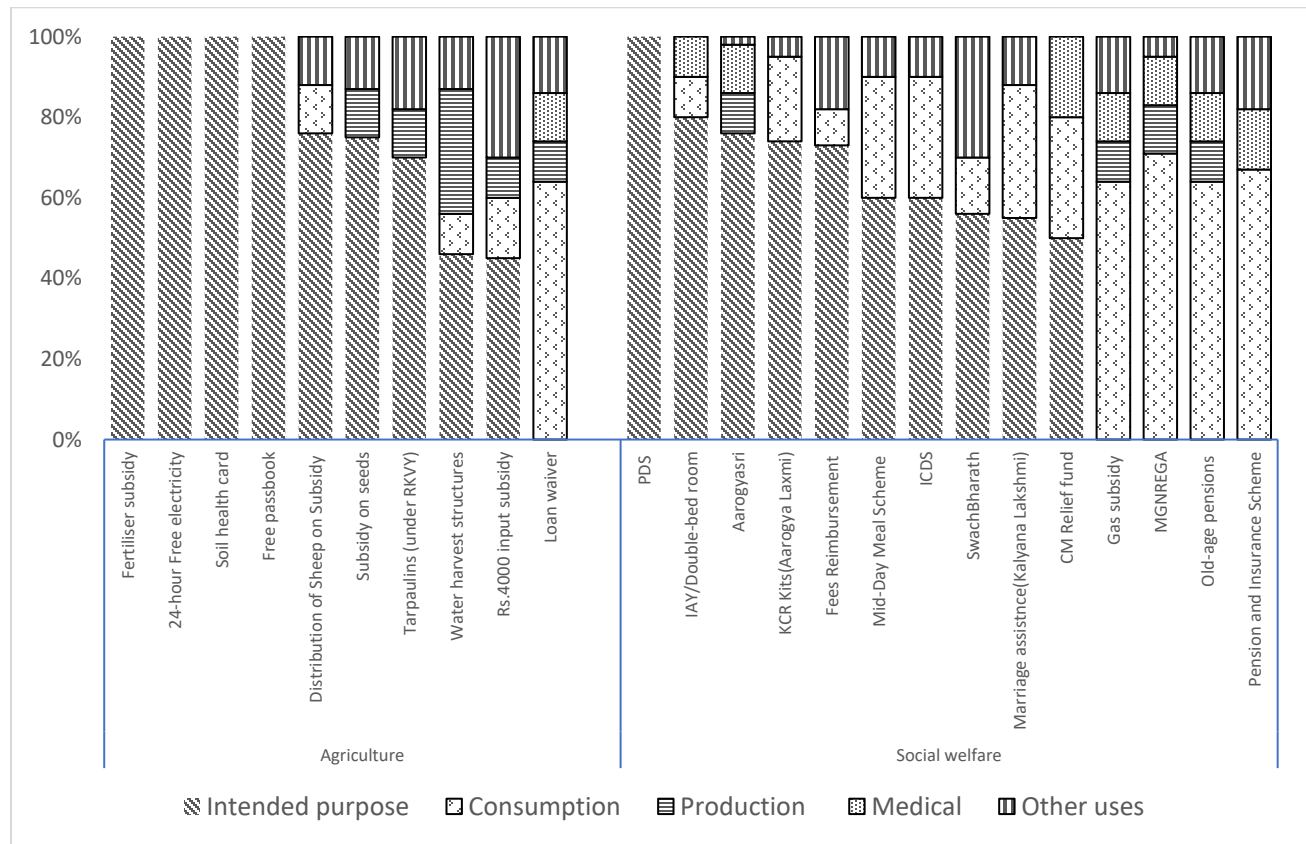
Table 5: Average amount (in Rs.)of benefit accrued by households under different schemes by Landholding class status in Rupees with its respective % beneficiary households in parenthesis (averages are calculated for the households who are benefited from the schemes)

Schemes	Land less	Small	Medium	Large
Total number of households	(97)	(126)	(58)	(6)
Double-bed-room	504000 (14.4)	504000 (6.3)	504000 (1.7)	
Kalyana Lakshmi/Shadi Mubarak	50000 (1.0)	50600 (4.0)	51000 (1.7)	
Aarogyasri	60000 (12.4)	43571 (10.3)	35000 (17.2)	100000 (16.7)
IAY	34429 (12.4)	33220 (29.4)	33700 (31.0)	
Crop Loan Waiver Scheme	80000 (1.0)	29375 (12.7)	41765 (29.3)	74500 (33.3)
CM relief fund	25000 (1.0)	14625 (1.6)	29500 (6.9)	
Aasara Pensions	12360 (45.4)	12649 (50.0)	12375 (27.6)	12000 (25.4)
Swachabharath	12000 (34.0)	12120 (32.5)	12053 (31.0)	12000 (16.7)
Arogya Lakshmi	12250 (3.1)	12000 (0.8)		
Pension Scheme for single women	12000 (1.0)	12000 (0.8)		

Fertilizer subsidy	12434 (91.8)	10952 (5.6)	25814 (8.6)	39312* (16.7)
NFSM		9416 (1.6)	8832 (1.7)	
Fees Reimbursement	4067 (3.1)	8063 (12.7)	23500 (13.8)	
ICDS	6814 (8.2)	7230 (7.1)	2500 (3.4)	
Mid-Day Meal Scheme	5357 (11.3)	5235 (11.9)	5333 (5.2)	
Rs. 4,000 Input support to Farmers		4599 (59.5)	13481 (67.2)	26333 (83.3)
MGNREGA	4300 (42.3)	4577 (61.1)	4126 (58.6)	3150 (50.0)
Water Harvest structures	3329 (22.7)	3433 (29.4)	3546 (31.0)	4000 (33.3)
NHM		3157 (5.6)	4000 (3.4)	
PDS	2511 (78.4)	3012 (80.2)	3299 (81.0)	3241 (66.7)
Mission Kakatiya		3000 (0.8)		
Free passbook	1667 (3.1)	2426 (69.8)	5936 (67.2)	6400* (83.3)
Distribution of KCR kits	2000 (4.1)	2000 (1.6)		
RKVY	1167 (3.1)	1250 (3.2)	113438 (6.9)	450000* (16.7)
Seed Subsidy	1102 (9.3)	1152 (25.4)	1912 (36.2)	1230 (10.0)
NRHM	2000 (1.0)			
Gas Subsidy	815 (62.9)	933 (75.4)	1015 (89.7)	900 (83.3)
24-hour electricity	668 (9.3)	548 (76.2)	768 (79.3)	730 (83.3)
Distribution of sheep on subsidy	80000 (1.0)			

Note: *indicates significant differences in means at 5% level by using t-test figures in parenthesis % beneficiaries in total households in each group; Source: Filed survey,2017

Figure 3. Use of benefits received from the government schemes



Source: Filed survey,2017

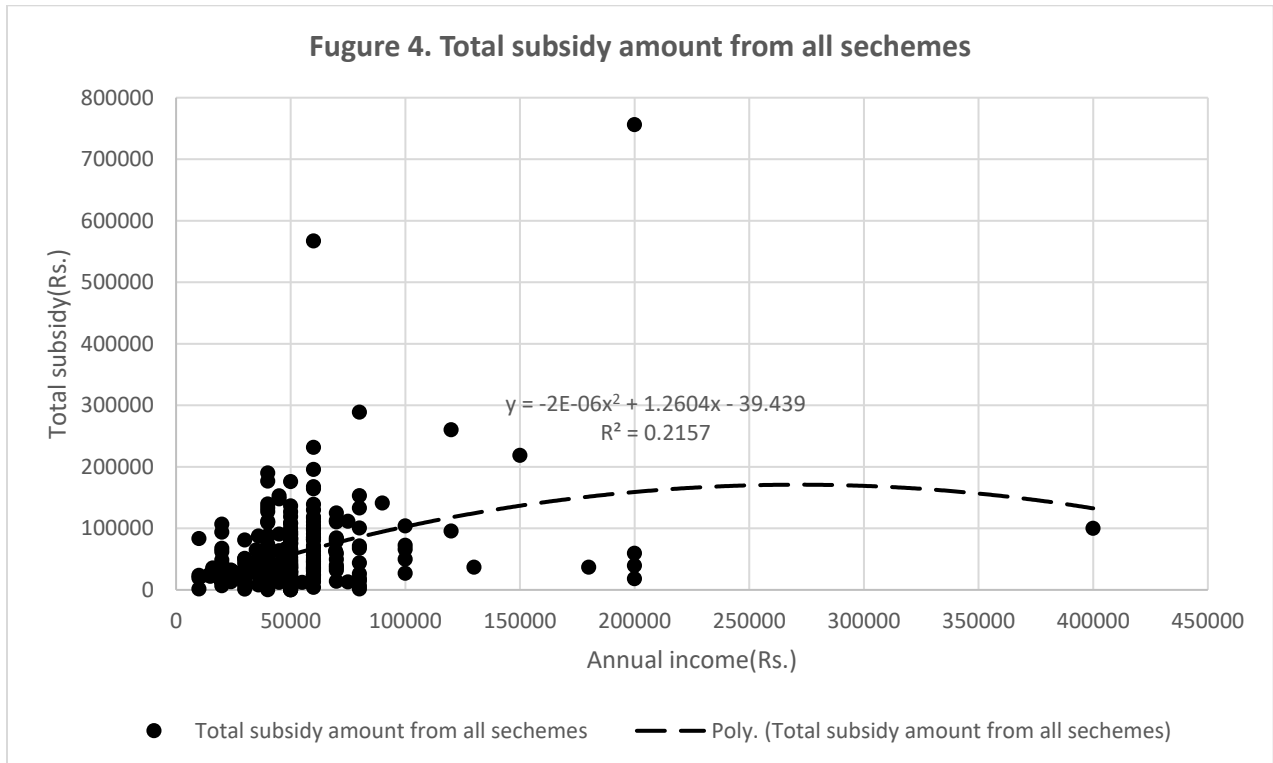
4.8 Utilization of benefits received

Figure 3 gives information on the use of benefits received from different schemes. Most of the benefits received from agricultural schemes were spent on intended purpose like fertilizer subsidy, free electricity, SHC, distribution of sheep, whereas the benefits received from the social welfare schemes like gas subsidy, MGNREGA and old-age pension were used mostly for consumption.

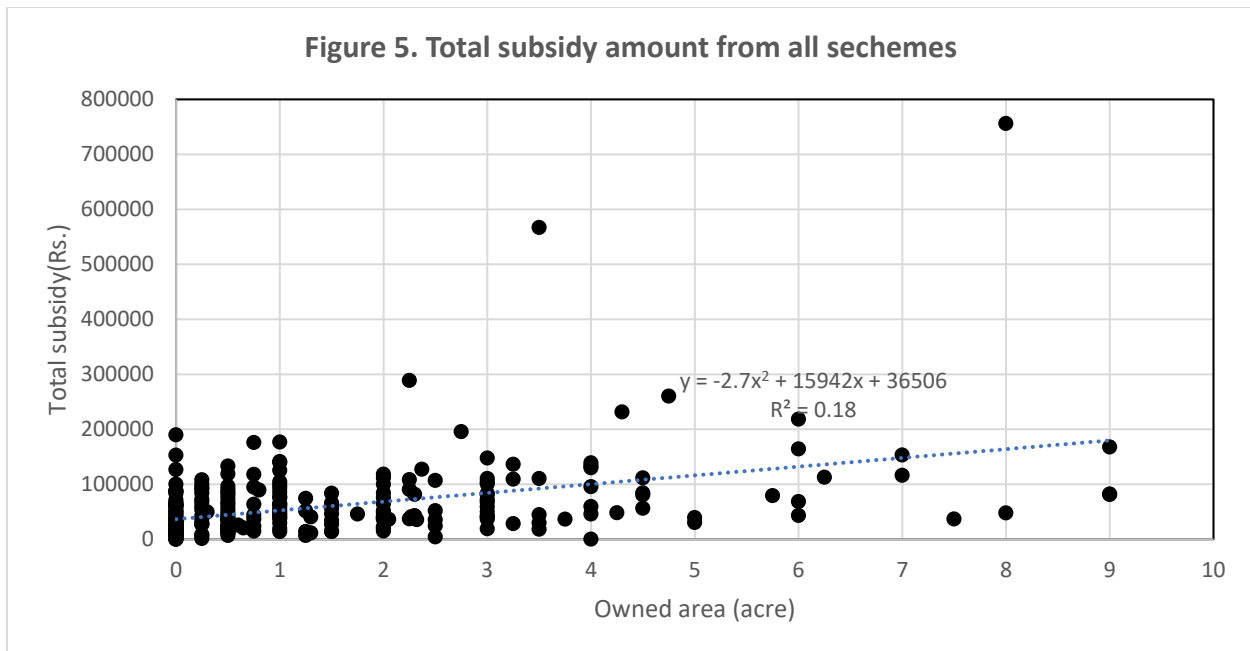
4.9 The overall impact of agricultural schemes

The penetration of different development and welfare schemes in the village is poor. Most of the central government schemes like the PMFBY, the PMKSY and the SHC are not optimally employed. Local agricultural officers and other

supporting staffs merely visit the villages as it is in a remote location, instead; many a times, they use network of local seed/fertilizer dealers to contact farmers to increase awareness about the schemes rather than directly interact with them. Overall, there is inverted U shape relationship exists between household income and total benefits received(Figure 4) while a positive relationship exists between landholding and benefits from the government schemes(Figure 5).



Source: Filed survey, 2017



Source: Filed survey, 2017

5. Conclusion

The paper examined the reach of different development and welfare schemes at village and household level in Telangana state in India. Although there are more than 50 schemes working in the village, only 29 were active. On average, each household has been benefited to the extent of Rs.58095 per annum. If we include large ticket double-bed-room scheme and Chief Minister Relief Fund, the extent of benefits has been increased to Rs.1,06,006 per annum in year 2017. Most of the households have been benefited from the Public Distribution System (PDS), gas subsidy, fertilizer subsidy, MGNREGA, 24-hour free electricity, Rs.4000 input support for farmers and old-age pensions but, the magnitude of benefits received by double-bed-room scheme, distribution of sheep, the RKVY, Kalyana Lakshmi, Aarogyasree, crop loan waiver are the most. The focus group discussions show that there are many problems while implementation of these schemes, especially identification of beneficiaries, delay in disbursement of subsidy, underutilization of subsidized inputs, misallocation of resources, etc. These

problems could be overcome by (i) Creating awareness about the central government schemes among the households through frequent visits by the local officers and sensitization in gram sabha, (ii) They can use the local educated youth and input dealers for accomplishing the task, (iii) There is a connectivity problem in the village because of the limited and underdeveloped the transport facility which, is the root cause of many problems faced by the villagers, hence there is a need for developing the same.

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Annexure 1: Schemes implemented in the village linked to the SDG

<p>SDG-1 (End of Poverty)</p>	<p>Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA): to guarantee 100 days of employment for every household per year through arranging public works in the vicinity of the village.</p>
<p>SDG-2 (End hunger, achieve food security and improved nutrition, and promote sustainable agriculture)</p>	<p>Fee passbook: Telangana state government distributing passbooks for each landholder with a clear title Rs. 4000 input subsidy: Telangana state government transferring money Rs.4000 per acre/season for all agricultural landholders in the state. National Horticulture Mission (NHM): promote horticultural crops in terms of subsidy to poly-houses, planting material etc. Rashtriya Krishi Vikas Yojana(RKVY): Distribution of subsidized farm machinery and tarpaulin sheets for storage (Rs.1250 subsidy with a total cost of Rs.2500). About 3 farmers in the village got tractors. Soil Health card (SHC): Although farmers are aware of SHC scheme until now farmers of the village did not have the SHCs. As the villages are remote and affected by Maoist movement agricultural officers are reluctant to go to the villages to collect soil samples. Seed Subsidy: To supply quality, improved and certified seed to the farmers at 50% subsidy to farmers Fertilizer subsidy: To make fertilizer application affordable to farmers to increase yields Subsidy for Buying Buffalo: Subsidy to purchase buffalo (hybrids mainly for dairy purpose). Distribution of sheep on subsidy: To provide the traditional shepherd families 20+1 sheep on 75% subsidy for their development to increase livelihoods from livestock rearing National Food Security Mission (NFSM): A few farmers got benefited from the water carrying pipes, seed subsidy with about 50% subsidy. Prime Minister Fasal Bima Yojana(PMFBY): PMFBY is a major flagship scheme to ensure crop losses, which is compulsory for</p>

	<p>loanee farmers and voluntary for non-loanee farmers. About 45% of the farmers are taken loans from the formal financial institutions, hence they paid premium under PMFBY. Until now, no single farmer received claims under the scheme.</p> <p>PMKSY</p> <p>Prime Minister Krishi Sinchai Yojana(PMKSY) is relating to providing irrigation facilities to farmers. Under PMKSY, there are no direct beneficiaries in the village. Under PMKSY, water lifting (motors, generators), carrying pipes, drip irrigation, sprinklers, farm ponds, check dams, recharge of bore wells, check dams were covered for subsidy.</p> <p>Mission Kakatiya: Under Renovation of tanks (which is Telangana state government scheme for rejuvenation of village tanks) there some funds allocated for renovation of the nearby water reservoir, which recharged water table in the village. All bore wells are working and they are also benefiting from the 24-hour free electricity.</p> <p>PKVY</p> <p>Paramparagath Krishi Vikas Yojana(PKVY) aims to promote organic agriculture. There is almost nil acreage under PKVY, as most of the farmers are growing only paddy and cotton which are grown for commercial purpose with very high yield.</p>
<p>SGD-3 (Ensure healthy lives and promote wellbeing)</p>	<p>Arogya Laxmi: In Anganwadi centres located in the village, every day one full-meal with sufficient nutrition to be provided for pregnant and children below the age of 6 (supported by the state government)</p> <p>Integrated Child Development Service (ICDS): ICDS helps in immunization, supplementary nutrition, health checkup, referral services, pre-school education (Non-Formal) and nutrition and health information through anganwadis located in each village. (Funded by the government of India)</p>

	<p>National Rural Health Mission (NRHM): Help provided by Accredited Social Health Activists (ASHA) workers for women and child</p> <p>Arogyasri: To cover the health expenses of the poor in case hospitalized.</p> <p>KCR Kits: Mother and child protection to reduce the infant mortality rate</p>
<p>SDG-4</p> <p>Ensure inclusive and equitable education</p>	<p>Fee reimbursement: To provide scholarships to the students of economically weaker sections pursuing higher education</p> <p>Mid-Day Meal scheme: To provide nutritious food for school children up to class 10th (14 years of age)</p>
<p>SDG-5</p> <p>Achieve gender equality and empower women and girls</p>	<p>Kalyan Laxmi/Shadi Mubarak: Help SC and ST girls with the financial assistance of Rs. 75,000 to cover their marriage expenses.</p> <p>Pension Scheme for single women: pension for widow women</p>
<p>SDG-6</p> <p>Ensure availability and sustainable management of water and sanitation for all</p>	<p>Mission Bhagiratha: providing drinking water facilities for each household through taps.</p> <p>Swach Bharath: To maintain cleanliness, eradicate open defecation, government subsidies construction of toilets in their houses for poor households</p> <p>Inkudu Guntalu(rainwater harvest structures): Subsidies for construction of rainwater harvesting structures</p>
<p>SDG-7</p> <p>Ensure access to affordable, reliable, sustainable, modern energy for all</p>	<p>24-hour free electricity for agriculture: To supply free power to cultivators to run pump sets used in drawing groundwater for irrigation</p> <p>LPG subsidy: To provide 12 subsidized LPG cylinders per year to households</p>

<p>SDG-10 Reduce inequality within and among countries</p>	<p>Aasara pensions (old age pension): A type of pension provided to old aged, disabled persons, widows, old aged weavers and other informal sector workers.</p> <p>Crop Loan Waiver scheme: To waive crop loans taken from formal financial institutions (scheduled commercial banks) up to 1 lakh</p>
<p>SDG-11 Make cities and human settlements inclusive, safe, resilient, and sustainable</p>	<p>Indira AwasYojana: housing subsidy for rural poor (central government)</p> <p>Double-bed-Room housing scheme: the state government scheme</p> <p>CM relief fund: Health problems which require expensive Medicare, Loss of life of kin & kith Loss of properties and sources of livelihood due to unforeseen incidents such as natural calamities, Road accidents, fire accidents.</p>

Source: State government, Telanagan state