

TRIBAL POPULATIONS IN KERALA'S DEVELOPMENT PROCESS: AN IMPACT EVALUATION OF POLICIES AND SCHEMES¹

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Abstract

Despite the benefits accruing to the *Kerala Development Model*, the exclusion of tribal communities in the Western Ghats continues to be a policy concern. While the *Model* was able to uplift the living conditions of large segments of Kerala's population, it is also responsible for producing high levels of economic and social and inequality in the state. The central government and the states of India have put in place a number of distinctive schemes and programmes aimed at improving the livelihood of tribes regarding food security, housing and self-empowerment. The object of this paper is to evaluate the impact of these development programmes by looking at two related issues. First, we looked at the utilization rate of development funds. Second, we collected information regarding the beneficiaries' own perceptions of the impact of development plans. In order to gather this information, we applied a survey to a sample of 200 households in the tribal Districts of Wayanad and Idukki. We conclude by arguing that the utilization rate of development funds in Kerala is overall inadequate, and by pointing to a series of concerns beneficiaries held in relation to the day-to-day functioning of development plans. Increasing the utilization rate of development funds and attending the concerns raised by tribal communities in respect to the way plans are implemented and managed, will surely work to improve the livelihood of tribal populations in the Western Ghats.

Keywords

South Asia Studies, India, Kerala, Tribal Populations, Development Studies

JEL: D31, I18, O43

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INTRODUCTION

In India, tribal-indigenous populations have been historically excluded from mainstream society, culture and civilization. Social exclusion, as the case of these tribes clearly exemplifies, is not simply about poor material living conditions; it regularly draws pejorative moral judgments about those marginalised that work against a favourable reception of their problems, making it more difficult to find appropriate solutions for them.

The economic and social condition of tribal communities is desperate. For instance, the average landholding has declined more rapidly among tribes than among any other social group in India. This reflects the alienation of tribes from their traditional lands largely due to displacement over infrastructure projects or fraudulent transactions (Panda, 2016). Numerous official reports identify tribes as the most excluded section of Indian society: their levels of literacy are lower than those affecting Scheduled Castes; and the same can be said of the former's poverty rates and health indicators. Shah (2014) points out that in contemporary India, tribes' living standards are adversely impacted by a series of factors such as money lending, land alienation, deforestation and agricultural displacement. All of these factors combine to produce high poverty rates among tribes. Further, tribes show the highest levels of victimization concerning the incidence of atrocious crimes (Ministry of Home Affairs, 2016; Ministry of Tribal Affairs, 2016; Planning Commission, 2016; Ministry of Social Justice and Empowerment, 2016). Hence, in spite of the significant economic growth that has characterised the Indian economy since the 1990s, the social condition of tribes remains markedly backwards.

The Indian central state and local governments have implemented a number of schemes and programmes aimed at improving the living conditions of tribal populations. Hence our interest in exploring the impact of such development plans with special reference to the plight of tribal populations in the state of Kerala.

TRIBAL POPULATIONS IN KERALA

Kerala houses 484,839 tribal people in 119,788 family units that constitute 1.43 per cent of the total population of the state. Wayanad and the Attappady region of Palakkad are the most populated tribal districts in Kerala. Wayanad has the highest concentration of tribal population (31.2%), followed by Idukki (11.5%) and Palakkad (10 %). The tribes show a very low literacy rate (75.81%) compared to the general population in Kerala. With respect to employment, only 10 per cent of the total tribal population living in Kerala cultivate their own land, whereas 40 per cent are agricultural wage labourers (Scheduled Tribes Development Department STDD, 2013).

The Paniyan (inhabitants of Pudur) represent 22.5 per cent of the total tribal population, followed by the Kurichian (9%) and the Malayarayan (8.9 %). The Malayarayan show an exemplary literacy rate of 94.5 per cent that is comparable to that of the general population of the state. However, the

Kattunaikan and Muthuvan show very low literacy rates, 40.2 and 41.5 per cent respectively. The Paniyan is the poorest group among the tribes: only 1.7 per cent of members are cultivators, whereas 65.7 per cent are agricultural wage labourers. Communities like the Kurichian, the Malayarayan and the Muthuvan include a greater number of cultivators, whilst the majority of the Adiyar and Kattunaikan are agricultural wage labourers.

Kerala's tribal population dwell mostly in the dense forests of the Western Ghats and are thereby cut off from mainstream society. They eke out a living either through rudimentary agrarian set ups or through the open access to forest resources which they exploit making use of traditional skills; they know the ins and outs of the forest and its biodiversity, and the importance of its resources for sustainable livelihood. Nonetheless, tribes usually face the dangers posed by infrastructural projects, wild animals and the harsh climatic conditions of the forest.

A major setback to the self-sustained tribal economy has occurred as the result of Kerala's proliferated large-scale migration of non-tribes into the prime abodes of the tribal population, seeking to exploit the rich natural resources of the forest. The expansion of the tourist industry in the Western Ghats represents one more factor contributing to the plunder of the forest. Such expansion keeps forest dwellers tied to inhumane forms of exploitation and reinforces the exclusion of most of the 450,000 aborigines of the state (CSSEIP, 2009; Rajasenan, 2010; Rajasenan, Bijith & Rajeev B, 2013).

Over time policy-makers have implemented several schemes and programmes seeking to uplift the tribal population from their present condition. During the 1970s the Indian government introduced the Integrated Tribal Development Project (ITDP).² In Kerala, seven ITDP district offices were created to bring all of the geographically scattered tribes into the development process. The ITDP has the supervisory authority over all the tribal development activities of the state. With the aim of promoting decentralization, the ITDP proceeded to allocate 50 per cent of all tribal development funds directly to local self-governments (Kjosavik & Shanmugaratnam, 2006).

The launching of the ambitious Tribal Sub-Plan (TSP)³ in 1974, the Decentralization of Tribal Development Schemes of 1996 and the passing of

² The Integrated Tribal Development Project is charged with striving for tribal welfare by designing policies/programmes/schemes aimed at tribal development and promoting voluntary efforts for tribal development. The ITDP now depends on The Ministry of Tribal Affairs, created in 1999, and releases grants to the State Governments for the implementation of schemes meant for the socio-economic development of tribes, protection against exploitation and support for tribal research institutes (<https://www.india.gov.in/official-website-ministry-tribal-affairs>).

³ The Tribal Sub Plan was implemented as from 1974-1975, the first year of the Government Fifth Annual Plan. It aimed at solving a wide range of issues such as poverty, malnourishment, low standards of living, exploitation of tribal populations, all

the Forest Rights Act (FRA)⁴ of 2006 represent further key signposts in the history of tribal development in Kerala (Chemmencheri, 2013). Nevertheless, in spite of a plethora of central and state schemes and special allocations made through the TSP, the distress of the tribal communities continues unabated (Rajasenan & Rajeev, 2013; Devika, 2016).

RESEARCH ISSUE

Unequal levels of economic growth and development among distinct social groups in Kerala are the result of marked imbalances in the ownership and control of productive assets such as land. Aside from landlessness, we must point to the existence of high levels of illiteracy, lack of occupational mobility and poor health indicators. Given these facts it is no surprise tribal populations comprise an extremely deprived and vulnerable social group, prompting indelible dark spots in the glorified development experience of the state, widely known as the *Kerala Model of Development* (Veron, 2001; Govindan & Sreekumar, 2003; Thresia; 2014).

We must note the existence of a culture of poverty among tribes that influences all aspects of their life. Following Lewis (1975) the culture of poverty expresses as an established pattern of adaptive mechanisms that are socially constructed by the poor from elements of their everyday lives, allowing them to survive in very adverse material and social conditions. The concept does not imply, as is usually contended (Valentine, 1968), that it is more important to abolish these adaptive cultural patterns, than to do away with poverty itself. On the contrary, as Harvey and Reed (1996) contend, the concept suggests that under favourable political conditions the poor hold within themselves the abilities necessary to forge their own destiny. Stated differently, if given access to and control of productive resources such as land, assets and expertise, the poor would be able to build and sustain their own communities.

Unfortunately, there are strong countering forces to the social progress of tribal populations in Kerala such as discrimination and the intergenerational transmission of poverty that tend to reinforce one another. In our view, there is an urgent need for the implementation and proper management of policies that

within a flexible framework that recognized the lack of uniformity of the problems facing tribes in different regions of the country (Institute of Social Sciences, 2003).

⁴ The Forest Rights Act legally recognises the rights of tribal communities to live in and from the forests and to protect and manage their lands. The Act was created to reverse the erosion of their traditional rights by forestry policies, encroachment on their lands by outsiders and the take-over of their forests (Ministry of Tribal Affairs and United Nations Development Programme (2016) Forest Rights Act, 2016: Act, Rules and Guidelines, New Delhi

are able to place the tribal population's degree of progress at a par with the social progress achieved by other social groups in Kerala.

The present research sets out to investigate the effectiveness and impact of a number of developmental schemes as they concern two Kerala districts mostly inhabited by tribal communities: Wayanad and Palakkad. The examination follows two different routes. First, we undertook the task of scrutinising the utilization rate of funds pertaining to tribal development schemes in the state. Second, we proceeded to explore the perceptions beneficiaries held in relation to the benefits attendant to such development plans.

METHODOLOGY

The present study is based upon primary and secondary data. The primary data was gathered during 2016 from interviews with household heads in the tribal districts of Wayanad and Palakkad. We selected 200 samples distributed in five clusters, three from Wayanad and two from Palakkad. The sample was determined through the application of stratified random sampling. The fieldwork was based on a household survey comprising 77 questions organized in three modules. We surveyed the head of each sample household and each interview lasted for over an hour. Three prominent tribal communities the Kuruman, the Kattunaikan and the Paniyan comprise the Wayanad sample. Two tribal communities, the Irular and the Kurumbar, comprise the sample from the Attappady/ Palakkad region. We identified the community's perceptions regards development programmes such as the Tribal Housing Schem⁵, the Integrated Child Developed Scheme (ICDS),⁶ the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS),⁷ the Kudumbashree⁸ and the Self-Help Groups (SHG).⁹ Factor Analysis (FA) was used to establish

⁵ Housing Schemes funded under provisions of the Integrated Tribal Development Project, the Rural Development Department, and NGOs.

⁶It was launched in 1975 with the objective of improving the nutritional and health status of children, pregnant women and lactating mothers (Mohan, 2017). In this study we were able to gather information on the nutritional dimension of the programme only.

⁷ Aims at enhancing livelihood security by providing at least one hundred days of guaranteed wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work (Mohan, 2017).

⁸ Poverty eradication and women empowerment programmes implemented by the State Poverty Eradication Mission (SPEM) of the Government of Kerala in 1997 (<http://www.kudumbashree.org/pages/171>).

⁹ Self-Help Groups are promoted under the National Rural Livelihoods Mission (NRLM). They promote micro-enterprises covering all aspects of self-employment, organization of the rural poor and capacity building, planning of activity clusters,

the recipient's perceptions regarding the functioning and management of development plans as a whole. We also gathered secondary data regarding the allocation/utilization ratio of development funds. The process of analysis relied on correspondence analysis, graphical methods and CHAID techniques.

EVALUATION OF UTILIZATION RATES.

The Indian government has allocated a substantial amount of funds intended to improve the living conditions of tribal populations in Kerala. One main purpose of these allocations is to achieve a fairer distribution of the benefits brought about by the *Kerala Model of Development* between the general population and tribal communities living in the state. Following is a appraisal of the TSP, firstly with respect to the panchayat level allocation and expenditure rate and secondly with respect to the ITDP and TOD schemes

1. Tribal Sub Plan (TSP)/Inter-Panchayat Analysis

Table 1 presents the effectiveness of programmes according to fund utilization rates on a per-rupee basis in various tribal development schemes for the period 2007-2015.

Table 1. Panchayat Per-Rupee Expenditure-cum-Allocation

Year	Panchayat					Total
	Meenangady	Meppady	Kalpetta	Agali	Pudur	
2007-2008	0.8772	0.2921	0.6560	0.5789	0.1480	0.5672
2008-2009	0.6760	0.5205	0.7479	0.7641	0.5525	0.6606
2009-2010	0.7877	0.5503	0.4127	0.3076	0.5437	0.5135
2010-2011	0.6914	0.5728	0.4833	0.7481	0.4893	0.5972
2011-2012	0.6217	0.5309	0.7393	0.2630	0.3231	0.5007
2012-2013	0.7559	0.6760	0.4867	0.3399	0.2566	0.4912
2013-2014	0.8497	0.7876	0.7762	0.4433	0.3878	0.6230
2014-2015	0.6898	0.6483	0.7018	0.5693	0.2858	0.5514
Total	0.7435	0.5725	0.6332	0.5018	0.3776	0.5640

Source: ITDP-TDO data, 2015-2016. Our own estimates

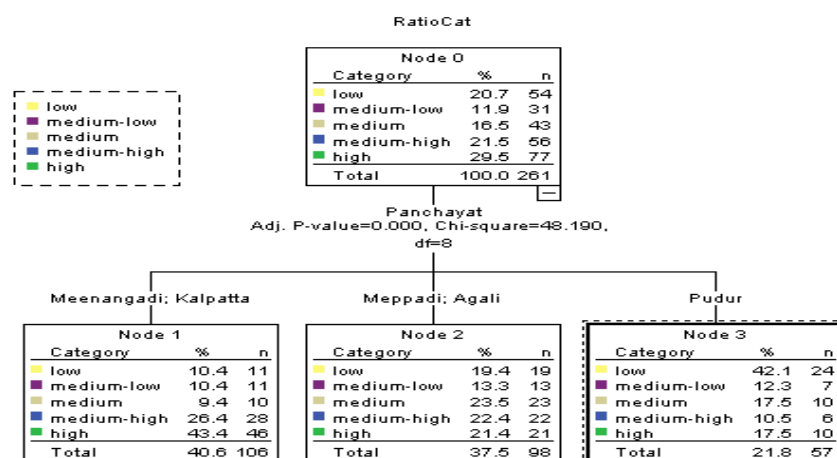
The values range from 0 to one (0 indicates non-spending and one full spending of the allocated funds). Results based on the panchayat level analysis indicate that the Meenangady panchayat of the Wayanad district has a high utilization rate (0.8772) as compared to other panchayats for the 2007-2008 period. Subsequently, Meenangady fails to achieve this same rate of fund utilization until 2014-2015. Pudur shows a utilization rate 0.1480 which is the

infrastructure build up, technology, credit and marketing. There are some 195.820 groups country wise (NRLM, 2017).

lowest spending panchayat in the sample. This result is a cause for concern due to the fact that Pudur is the poorest tribal community in Kerala. In the cases of Kalpetta and Meenangady the utilization rate is more adequate, followed in descending order by Meppady and Agali. Overall, the data show an inadequate and decreasing utilization rate of funds. The issue of underutilization of funds becomes more poignant when we look at the backward condition of the tribes and the actual resources needed to generate a multiplier effect on other targets. Thus, in spite of the impressive allocations¹⁰ associated to several development and welfare programmes, the underutilization of funds makes the schemes destined for tribes' advancement remain at best limited.

We employed the technique of Chi-Squared Automatic Interaction Detector (CHAID) as an evaluation tool concerning the inferences obtained from the analysis of the variance in the fund's allocation/expenditure ratio. For this purpose, the values are further categorized into a five-point-scale according to its score, assigned as follows: Low (0.20 and below), Medium-low (0.21-0.40), Medium (0.41-0.60), Medium-high (0.61-0.80) and High (0.81 and above). These values are followed by plotted CHAID prediction model using CHAID algorithm (see Figure 1).

Figure 1. CHAID Diagram for Five Panchayats



Source: ITDP-TDO data, 2015-2016. Our own estimates

¹⁰ For a full account of resources allocated to the Tribal Sub Plan by sector see: Planning Commission (2012).

Nodes 0, one, two, and three represent five panchayats (Meenangadi, Kalpetta, Meppady, Agali and Pudur). Node 0 represents parent one showing all the utilization categories. Most of the observations fall under a medium-high to high ratio. The second split shows the fragmentation of Node 0 into three terminal nodes: Node one corresponds to Meenangady and Kalpetta; Node two to Meppady and Agali; Node three to Pudur, based on the panchayat with a significant Chi-Square value of 40.968 with eight degrees of freedom. The Meenangadi and Kalpetta results are merged together in Node one, as they do not show any significant differences in the utilization rate. Similarly, Meppady and Agali only show slight differences in the utilization rate as they share Node two. Meenangady and Kalpetta show a high utilization rate of 43.4 per cent in most of the cases, whereas the Pudur panchayat shows the opposite with a low utilization rate of 42.1 per cent in most of the cases.

The CHAID inference concerning the overall fund utilization for the period 2007-2015 based on panchayats, reveals that the Meenangady and Kalpetta regions have a better utilization rate with concomitant development. However, in the case of the remaining three panchayats -Meppady, Agali and Pudur- the utilization rate is low hence contributing to keep these regions mostly underdeveloped and backward.

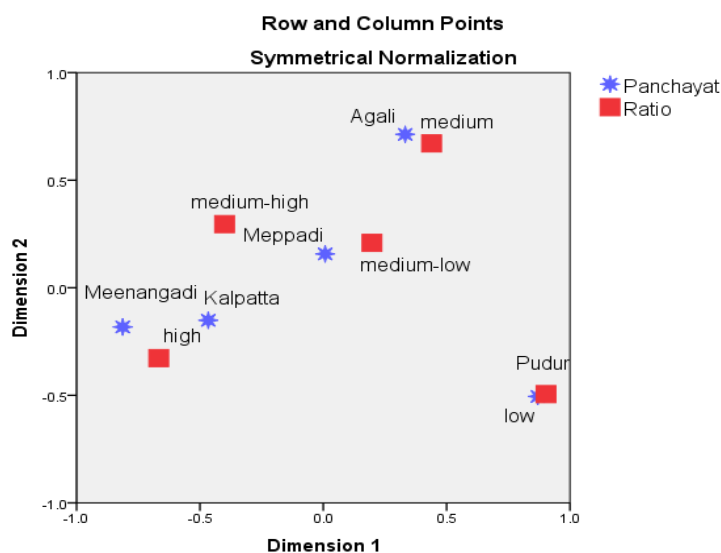
Inter-panchayat differences in the utilization rate of development assistance are again evaluated by plotting the utilization rate values with the aid of Correspondence Analysis (CA). Table 2 shows significant Chi-Square values and an inertia value of 0.177, which means that the model explains 17.7 per cent of the total variance. The Eigen values (inertia) reflect the relative importance of each dimension. Out of the total variance of 17.7 per cent, 77.6 per cent is explained by the first dimension. Similarly, the second dimension, accounts for 18.4 per cent of the total inertia.

Table 2. Panchayat by Fund Utilization Rate 2007-2015

Dimension	Singular Value	Inertia	Chi-Square	Sig.	Proportion of Inertia		Confidence Singular Value	
					Accounted for	Cumulative	Standard Deviation	Correlation
1	.371	.137			.776	.776	.056	.137
2	.180	.032			.184	.960	.064	
3	.084	.007			.040	1.000		
4	.006	.000			.000	1.000		
Total		.177	46.183	.000 ^a	1.000	1.000		

Correspondence Analysis by region and utilization rate (Figure 2) indicate that the Meenangady and Kalpetta regions fall closer to the "High" fund utilization rate; hence the results are comparable to the inferences obtained from the CHAID analysis. A clear-cut difference can also be inferred for the Meppady and Agali panchayats with respect to CHAID and CA, as in CHAID these panchayats appear in Node two, whereas Meppady is closer to the Medium-low level and Agali is closer to the "Medium" level of fund utilization as per CA. These results tell that the Agali panchayat has a better fund utilization rate compared to Meppady for the period under review. In both analyses, Pudur comes close to the "Low" utilization rate.

Figure 2. Correspondence Chart: Panchayat and Fund Utilization for 2007-2015



Source: Source: ITDP-TDO data, 2015-2016. Our own estimates

The statistical inferences shown in Figure 2 are indicative of the overall inadequate fund utilization rate associated to development plans. Indeed, Figure two reveals that most panchayats fall between the medium to low utilization rate.

2. Integrated Tribal Development Project (ITDP) and Tribal Development Office (TDO) Analysis of Utilization Rates

Following we offer an evaluation of the ITDP and the TDO in terms of their utilization rate for various years.

Table 3. Per-Rupee Expenditure-cum-Allocation in ITDP and TDO¹¹

Year	Agali ITDP	Kalpetta ITDP	Palakkad TDO	Sultan Batheri TDO	Mananthavady TDO	Total
2007-2008	1.01	0.97	1.01	0.88	1.02	0.98
2008-2009	1.00	1.01	1.02	0.99	0.97	1.00
2009-2010	1.03	0.99	1.01	0.83	0.83	0.94

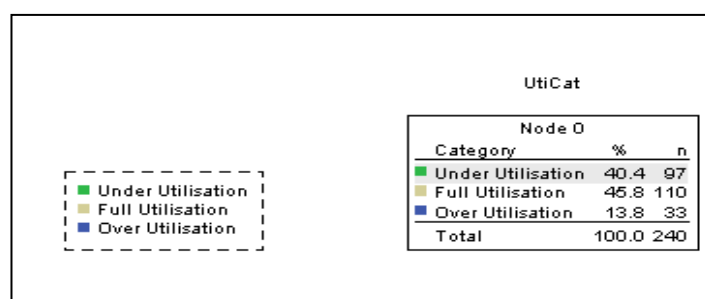
¹¹ Official data for TDO is available for Districts. Pudur is located within the Palakkad District of Kerala. Sultan Batheri and Mananthavady are located within the Wayanad District of Kerala

2010-2011	1.10	0.95	1.03	0.92	1.02	1.00
2011-2012	0.92	1.01	1.08	1.02	0.99	1.00
2012-2013	1.00	1.02	1.06	0.97	1.00	1.01
2013-2014	1.01	1.00	1.05	0.84	0.89	0.96
2014-2015	0.98	1.02	1.00	0.88	1.01	0.98
Total	1.01	1.00	1.03	0.91	0.97	0.98

Source: ITDP-TDO data, 2015-2016. Our Own Estimates

The results presented in Figure 3 disclose that, overall, the majority of development schemes fall within the high utilization rate (0.80 per one rupee of allocation) of funds

Figure 3. CHAID Diagram ITDP-TDO



Source: ITDP-TDO data, 2015-2016. Our Own Estimates

Nonetheless, in comparison Palakkad and Mananthavady TDO show a lower utilization rate. The CHAID analysis does not reveal significant differences between the allocation and expenditure ratio. This is why the CHAID does not develop into a tree level node extension (Figure 3) with respect to the ITDP and TDO based schemes included in the TSP.

Beneficiaries' Perceptions of the Benefits Attendant to Development Programs

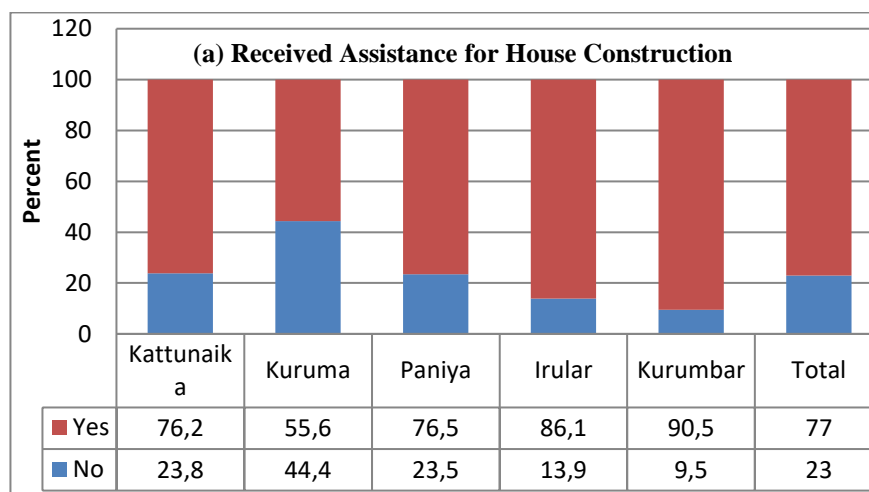
1. Housing Schemes

Financial housing assistance is provided to tribes under various government schemes. Housing assistance is also provided through agencies like the Attappady Hills Development Society (AHADS).¹² Figure 4.a reveals

¹² AHADS is a Project Implementation Agency for the Attappady Wasteland Comprehensive Environmental Conservation Project. The society has a Governing Body with due representation of the Panchayats, Scientific Organizations, selected experts, and peoples' representatives. Engages in policy making at the project level, issues directions for the implementation of activities. <https://kerala.gov.in/ahads>

that 77 per cent of the sampled households received government aid under the sponsorship of different housing schemes. Inter-tribal comparisons show that 55.6 per cent of the Kuruman families, 76.5 per cent of Paniyan families and 76.2 per cent of Kattunaikan families received government funds for house construction. The Irular and Kurumban groups received a higher level of assistance for house construction, 86.1 per cent and 90.5 per cent respectively.

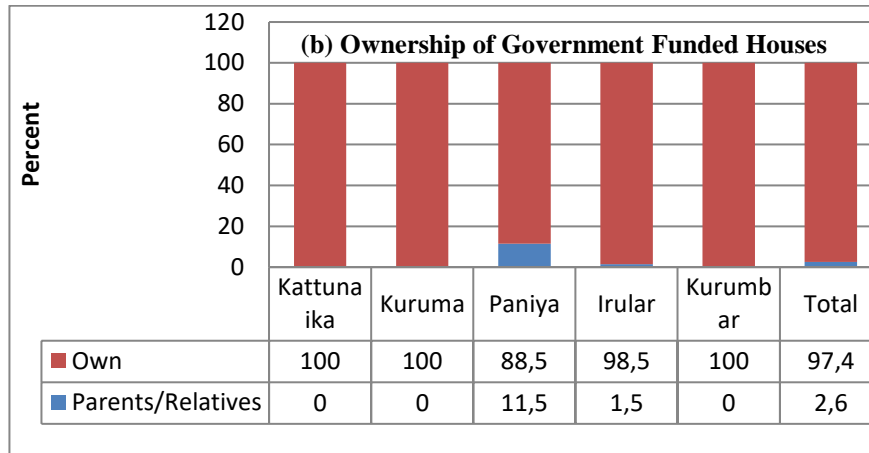
Figure 4.a. Received Assistance Under Housing Scheme



Source: Authors' Survey (2016).

Figure 4.b reveals that nearly the totality of the houses built with government assistance were owned by the household head; however, in the Pudur community 11.5 per cent of the homes were owned by relatives of the household head. The overall results show that the main source of funds for house construction was government aid, linked to different policy schemes

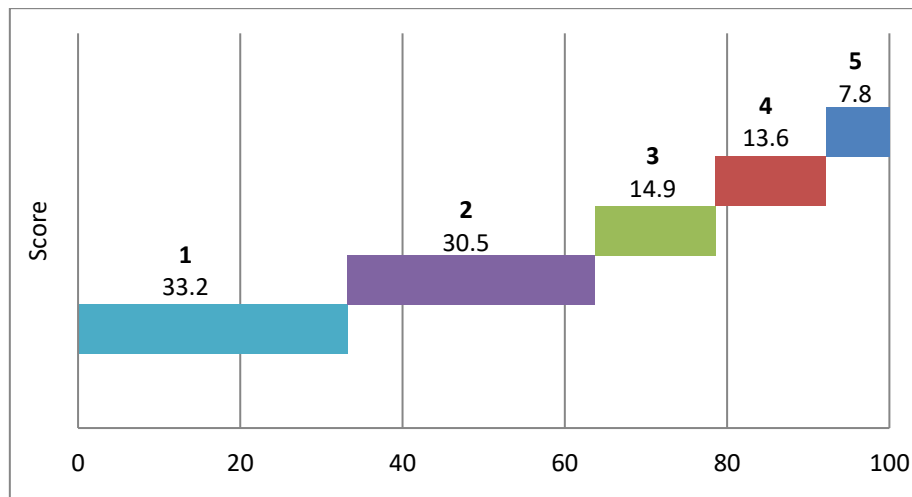
Figure 4.b Ownership of Government Funded Houses



Source: Authors' Survey (2016)

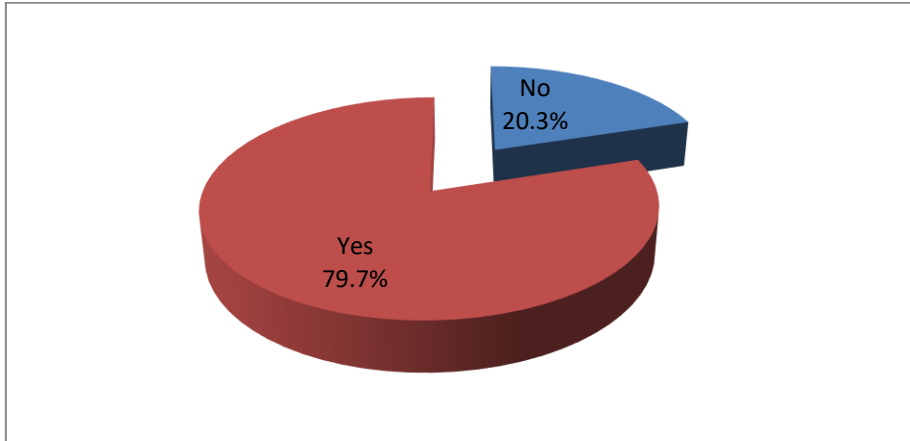
Figure 5 indicates, that the majority of respondents were dissatisfied with the financial support received from housing schemes. Nonetheless, few respondents (7.8%) expressed high levels of satisfaction with said support.

Figure 5. Level of Satisfaction with Housing Schemes



Source: Authors' Survey (2016).

Most of the respondents expressed concerns regarding the shortfall of funds allocated to housing projects. Figure 6 shows that 79.7 per cent of the households receiving support reported requiring additional financial assistance in order to complete their houses.

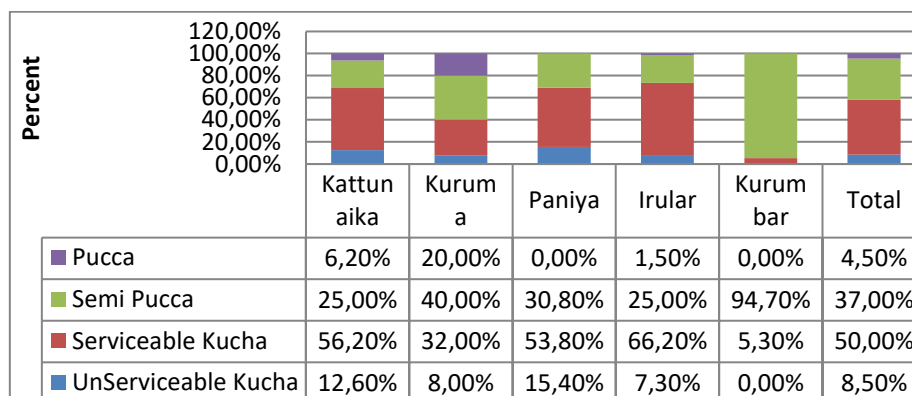
Figure 6. Additional Funds Required for Completion of House

Source: Authors' Survey (2016).

On the whole, our data indicate that beneficiaries blamed the limited amount of funds received from housing programs for the poor condition of their homes. Dissatisfaction of beneficiaries with housing support was mostly related to the high costs associated to both construction labour and the transportation of construction materials.

The setbacks associated with insufficient support from housing schemes shows in that only 4.5 per cent of the government funded houses are pucca.¹³ Pucca houses are to be found mainly in areas belonging to the forward Kuruma tribe. Indeed, the majority of Kuruma houses are either semi-pucca or pucca (40% and 20 % respectively). We must note that in terms of educational level, land ownership and income the Kuruma are comparatively better off than other Kerala tribes. These comparative advantages allow the Kuruma to invest their own savings and borrow money for the purpose of house construction (Rajaseenan et. al, 2013; Rajaseenan, 2015; Rajaseenan & Rajeev, 2016^a).

¹³ Pucca in this case means houses made of solid materials such as stone, brick, concrete, tile and metal

Figure 7. Condition of Government Funded Houses

Source: Authors' Survey (2016).

Figure 7 shows that 94.7 per cent of the houses of the Kurumbar community, a backward tribal group, are semi-pucca. This is an exceptional case owing to the fact that AHADS has taken up the initiative of constructing houses in this area. In this region, the houses are usually completed with proper flooring, windows and doors. The case is that backward tribes such as the Kurumbar and the Kattunaika receive special assistance for house construction; yet, in spite of this support, the majority of Kattunaika houses are kutchas.¹⁴ Such condition is mostly due to the fact that these backward tribes live deep within the forest and have no access to proper roads or transportation facilities. In fact, the Kattunaika colonies are located far away from a proper road. The only way of reaching these colonies is by the use of 4X4 transmission vehicles and even then, visitors and dwellers have to travel through dense forest exposing themselves to the attacks from elephants and other wild animals. The majority of Kattunaika, Paniya and Irular houses are kutchas; thus, their residents reported requiring further financial assistance to complete construction work.

2. The Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

Our data revealed that 34 per cent of the surveyed households hold the MGNREGS job card. On average, beneficiaries worked for 1.8 days a week in the MGNREGS and requested to work more days under the scheme. We also found that the MGNREGS is the main source of employment for most women. This finding is in-line with that of Breikreuz et al. (2017) who found that in Kerala and Tamil Nadu, the rate of women participation in the guaranteed job scheme approached 85 per cent.

¹⁴ Kutchas are houses made of mud and other low-quality materials

Table 4 shows that the Irular and the Kuruma communities register the highest percentage of families holding the MGNREGS job card (43% and 35.6% respectively). On the other hand, participation in the scheme is 23.8 per cent for the Kattunaika, 20.6 per cent for the Paniya, and 28.6 per cent for the Kurumban. As shown in Table 4, 67.60 per cent of the surveyed households relied on the scheme as a critical employment option. The scheme also represented an important subsidiary means of employment for 36.80 per cent of the households. The data at community level reveals that employed members in the Irular, Kurumbar and Pudur households relied heavily on the MGNREGS as a significant source of income.

Table 4. Percentage of Households Holding MGNREGS Job Card and MGNREGS as Main and Subsidiary Employment by Tribal Community

Community	Possess Job Card	Scheme is Main Source of Employment	Scheme is Subsidiary Source of Employment
Kattunaika	23.80	40.00	60.00
Kuruma	35.60	50.00	50.00
Paniya	20.60	71.40	28.60
Irular	43.00	76.50	29.40
Kurumbar	28.60	83.30	33.30
Total	34.00	67.60	36.80

Source: Authors' Survey (2016)

Table 5 reveals that the MGNREGS income represents a large share of household earnings for the tribes. Indeed, such income represents on average 0.4863 of each rupee household income.

Table 5. Share of MGNREGS Income in the Household Earnings

Caste/Community	Mean
Kattunaika	1.0000
Kuruma	.3375
Paniya	.3640
Irular	.5158
Kurumbar	.4880
Total	.4863

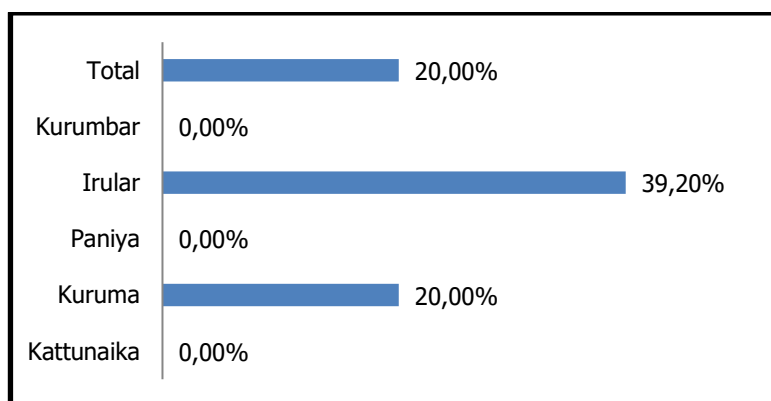
Source: Authors' estimations based on field survey data (2016).

The MGNREGS emerged as the main source of employment and income for the Kattunaika households. For their part, the Kurumban and Irular displayed a value of 0.4880 and 0.5158, respectively. The average value is lower for the tribal groups of Wayanad: the Paniya with 0.3640 and the Kuruma with 0.3375. We must note that the Paniya derive most of their income from wage labour, whereas the Kuruma obtain most of their income from farming their own land. The limited workdays available in the MGNREGS determines that a member can only earn an income between Rs. 1,700 and 1,800 per month; nonetheless this discrete income represents a significant amount of money for community members who do not have other sources of employment.

3. Self-Help Groups (SHG) and Kudumbashree Membership¹⁵

The SHG scheme has been hailed in several studies as pivotal in the empowerment of rural women in Kerala. The scheme, it is argued, has contributed to the alleviation of poverty, in the promotion of women's entrepreneurial capacity and in overall household prosperity (Reji, 2013; Kumar & Jasheena, 2016). However, the scheme's impact on tribal women has been trivial. Indeed, one indication of the problems faced by SHG in Kerala is the low percentage of tribal women enrolled in the scheme. Figure 8 shows that scarcely 20 per cent of the households included in our sample subscribed to the SHG. The SHG membership is limited to the Kuruman and Irular households, whereas most of the backward tribes in Kerala such as the Kattunaikan, the Kurumban and the Paniyan are far from joining the scheme.

Figure 8. Membership in SHG/Kudumbashree



Source: Authors' Survey (2016).

Interviewees from the Kuruma and the Irular tribes reported that the SHG were a failure. They stated that the scheme was unable to bring forth income generation activities, to produce regular savings for households, to facilitate access to capital and loans, and to foster labour skills. Another fundamental reason for the failure of the SHG in Kerala's tribal districts is related to the lack of interaction between tribal and non-tribal populations. This is a very serious problem: Tribes, especially the backward tribal groups, are not allowed to participate in non-tribal SHG. As a matter of fact, the SHG are formally thought of as consisting of people of similar socio-economic standing and who live in close proximity to each other (Planning Commission, 2008). Moreover, non-

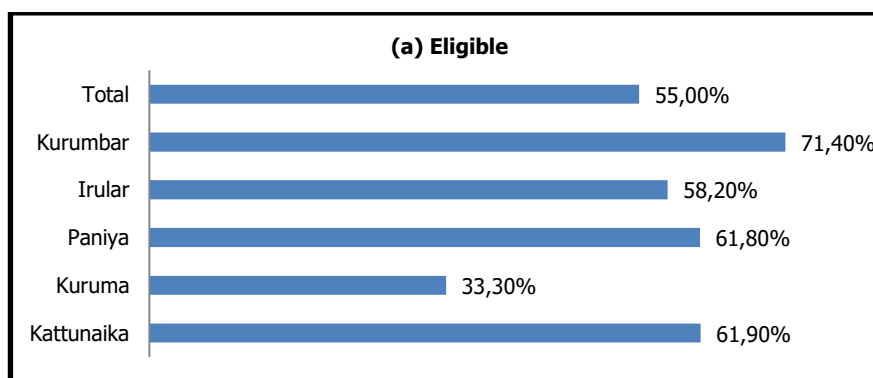
¹⁵ We must note that in Kerala the SHG are affiliated to the Kudumbashree, a poverty eradication mission ran by the state government.

tribal communities generally refuse to come into contact with tribal groups. Segregation is rooted in various issues such as class and caste stigma, the isolated nature of tribal communities and the prejudiced attitude mainstream society holds in relation to tribal populations (Manuel & Kumar, 2012).

4. The Integrated Child Developed Scheme (ICDS)

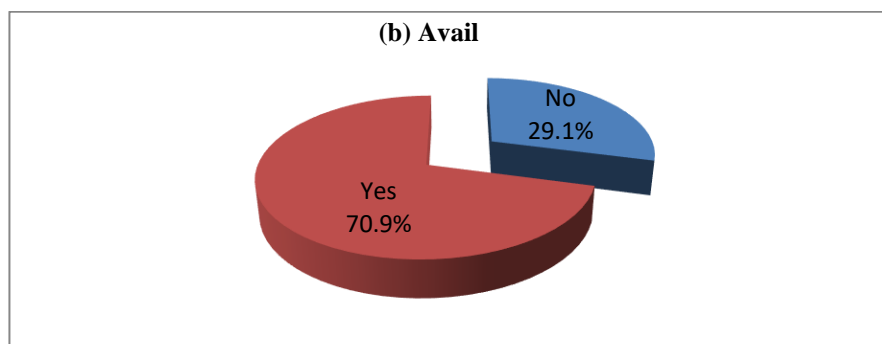
Our research assessed the sample's level of participation in the ICDS. The scheme is meant to provide food supplements to children of different ages and to their mothers. The ICDS also contemplates providing education and health care to beneficiaries.¹⁶ The responses to questions concerning the ICDS are presented in Figures 9.a and 9.b. We found that 110 households were eligible for participating in the scheme, representing 55 per cent of the total sample. Of these 55 per cent of households, 70.9 per cent were enrolled in the scheme.

Figure 9.a. Eligible for ICDS Assistance (%)



Source: Authors' Survey (2016).

¹⁶ Our research was able to gather reliable data regarding the food security dimension of the scheme only.

Figure 9.b. Participation in ICDS (%)

Source: Authors' Survey (2016).

When speaking about the benefits associated to the ICDS, recipients complained about the irregularity of the food supply. The irregularity occurs on account of three related issues: tribal hamlets are located in remote areas, the elevated cost of transporting foodstuffs and the high cost involved for beneficiaries in having to collect provisions in faraway anganwadis.¹⁷

Table 6 shows the various categories of ICDS as these relate to children's age. Twenty-nine households were eligible for assistance to children less than three years of age; 42 households were eligible for children between three and six years of age; and 56 households were eligible for assistance to girls between six and 14 years of age. Our data indicates that some households were not fully aware of their entitlements under each age category.

Table 6. ICDS Assistance

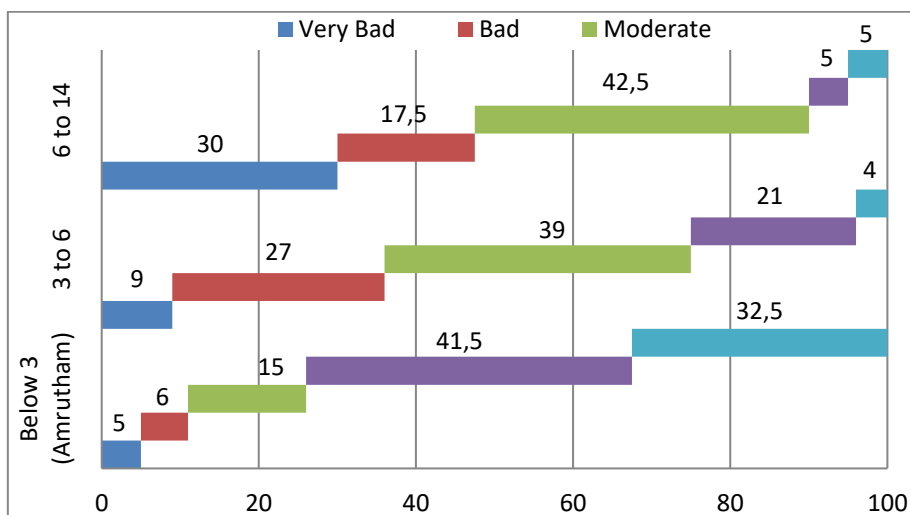
Type	Number of Households		%
	Eligible	Avail	
Less than 3 years of age	Eligible	29	93.1
	Avail	27	
3 to 6 years of age	Eligible	42	73.8
	Avail	31	
6 to 15 years of (girls)	Eligible	56	71.4
	Avail	40	
Total	Eligible	110	70.9
	Avail	78	

Source: Authors' Survey (2016).

Figure 10 presents the opinions of our interviewees regarding the quality of the food provided under the ICDS programme.

¹⁷ Rural centres providing care for mothers and children

Figure 10. Quality Assessment of ICDS Foodstuffs



Source: Authors' Survey (2016).

Most of the mothers receiving Amrutham (a baby food supplement) were satisfied with the quality of the infant formula and other food items provided through the anganwadis. Mothers rated foodstuffs supplied to children between three and six years of age as moderately good or very good. However, a good percentage of mothers (47.5%) with children between the ages of six and 15 years old said that the food was of low quality. Notwithstanding, all mothers were very concerned regarding the irregular pattern of food supply.

5. Beneficiaries' Perceptions Regarding the Impact of Development Programmes

A complementary way of evaluating development schemes entails asking recipients about their own opinion vis-à-vis the benefits associated to such programmes. The present section tries to answer these questions relying on Factor Analysis (FA). The Kaiser-Meyer- Olkin test showed the adequacy of our data for Factor Analysis (Table 7).

Table 7. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,565
Bartlett's Test of Sphericity	Approx. Chi-Square	696.797
	df	66
	Sig.	,000

We gathered information concerning the perception of household heads regarding 12 statements relating to the efficacy of government programmes, the attitude of officials toward community issues and the level of community involvement in decision-making. The answers were recorded in a five-point scale and analysed with the aid of Factor Analysis. Communalities (Table 8)

explains the variability in a particular variable accounted for by all factors extracted in the factor analysis

Table 8. Unrotated Communalities

Items	Initial	Extraction
Local authorities should design the programmes/schemes based on the needs of the community	1.000	.682
Lack of efficient leadership in representing community issues	1.000	.591
Criteria followed in the selection of beneficiaries is not adequate	1.000	.713
Funds allocated for various programmes are inadequate	1.000	.509
Delay in getting financial assistance hinders the success of development programmes	1.000	.694
The local administration plays a pivotal role in the overall success of development programmes	1.000	.592
Present government schemes are sufficient for the welfare of tribes	1.000	.753
The effectiveness of development programmes depends on the attitude of local officials towards community issues	1.000	.673
The funds for tribal development are not properly utilized	1.000	.625
Community involvement plays a pivotal role in framing policies and programmes	1.000	.659
Coordination among the community members is essential in selecting the beneficiaries	1.000	.765
Community issues are not properly addressed in meetings	1.000	.461

Source: Authors' estimations based on field survey data (2016).

Four factors with Eigen values of more than 1 are extracted (Table 9), which together explain 64.32 per cent of the total variance. The first factor has an Eigen value of 2.746 in the rotated solution, which explains 22.887 per cent of the variance. 16.589 per cent of the variance is explained by the second factor whereas factors three and four explain 13.423 and 11.416 percentages respectively of the total variance.

Table 9. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.420	28.502	28.502	3.420	28.502	28.502	2.746	22.887	22.887
2	1.684	14.037	42.538	1.684	14.037	42.538	1.991	16.589	39.477
3	1.396	11.636	54.174	1.396	11.636	54.174	1.611	13.427	52.904
4	1.217	10.146	64.320	1.217	10.146	64.320	1.370	11.416	64.320
5	.884	7.365	71.684						
6	.706	5.886	77.571						
7	.682	5.686	83.257						
8	.567	4.728	87.985						
9	.542	4.515	92.500						
10	.429	3.575	96.075						
11	.325	2.707	98.782						
12	.146	1.218	100.000						

Source: Authors' estimation based on field survey data (2016).

Due to the inconclusiveness of the component matrix (see Table 10), a rotated solution was sought. Results are presented in Table 11.

Table 10. Component Matrix

Items	Component			
	1	2	3	4
The criteria followed in the selection of beneficiaries is not adequate	.687	-.427	.108	.218
Delay in getting financial assistance hinder the success of development programmes	.659	-.492	-.097	.090
The funds allocated for various programmes are inadequate	.651	-.133	-.211	-.151
Community issues are not properly addressed in the meetings	.644	-.177	-.104	-.069
The local administration plays a pivotal role in the overall success of development programmes	.619	-.056	.345	-.296
Coordination among the community members is essential in selecting the beneficiary	.579	.526	-.195	-.340
Community involvement plays a pivotal role in framing policies and programmes	.485	.609	-.104	-.205
The effectiveness of development programmes depends on the attitude of the local officials towards community issues	.370	.549	.484	-.029
Local authorities should design the programmes/schemes based on the needs of the community	.439	-.213	.662	.074
Lack of efficient leadership in representing the community issues	.503	-.052	-.570	.101
Present government schemes are sufficient for the welfare of tribes	.232	.343	.233	.726
The funds for tribal development are not properly utilized	.294	.306	-.316	.587

Source: Authors' estimation based on field survey data (2016).

The rotated component matrix features four factors. Five statements linked to problems of development assistance feature as the first factor. Statements relating to the role-played by community members in the success of development programmes and attitudes of local authorities to community issues constitute the second factor. The role of local authorities in the success of development schemes emerged as the third factor. As to the fourth factor, tribe members acknowledged that government schemes were sound. Yet, tribes complained about the inappropriate use of funds in the task of uplifting tribal living conditions.

Table 11. Rotated Component Matrix

Items	Component			
	1	2	3	4
Delay in getting financial assistance hinders the success of development programmes	0.813	-0.087	0.153	0.032
The criteria followed in the selection of beneficiaries is not adequate	0.743	-0.103	0.349	0.171
The funds allocated for various programmes are inadequate	0.646	0.298	0.023	-0.051
Community issues are not properly addressed in the meetings	0.633	0.213	0.123	0.002
Lack of efficient leadership in representing the community issues	0.604	0.225	-0.373	0.19
Coordination among the community members is essential in selecting the beneficiary	0.231	0.843	-0.024	0.01

Community involvement plays a pivotal role in framing policies and programmes	0.09	0.794	0.024	0.141
The effectiveness of development programmes depends on the attitude of the local officials towards community issues	0.145	0.549	0.542	0.237
The Local authorities should design the programmes/schemes based on the needs of the community	0.258	-0.063	0.78	0.055
The local administration plays a pivotal role in the overall success of development programmes	0.404	0.336	0.534	-0.176
Present government schemes are sufficient for the welfare of tribes	-0.044	0.037	0.263	0.825
The funds for tribal development are not properly utilized	0.188	0.163	-0.23	0.714

Source: Authors' estimation based on field survey data (2016).

Overall, tribe members reported that present development schemes are a right step in the direction of economic and social development; however, they argued that schemes and plans needed proper implementation, assessment and a scaling up of strategies. By way of example, beneficiaries often experienced inordinate delays in receiving financial assistance and argued that such delays worked against the overall success of development programmes. A second issue of concern was related to the methods employed by official agencies in selecting the household/member beneficiary. The interviewees expressed the view that community participation was a much better way of implementing plans, selecting beneficiaries and providing assistance to the needy. Thirdly, there was concern with the shortfall of funds allocated to some government schemes, specially housing related schemes.

Conclusions

The present paper aimed to evaluate the impact of a number of development programs over the living conditions of tribal populations in the districts of Wayanad and Palakkad. We determined this impact by recourse to two strategies. Firstly, by analysing the utilization rate of funds pertaining to such developmental schemes. Secondly, by gathering information about the beneficiaries' own perceptions concerning the quality of development programs.

Our data show that fund utilization rates and per-rupee utilization rate of funds are generally inadequate. Most panchayats showed a utilization rate that fell into the medium or low measure. Special attention must be paid to the case of the Paniyan community who resides in the Pudur panchayat: this is the poorest tribal panchayat in Kerala and yet it displays the lowest utilization rate in our sample. By all accounts, efforts must be made in order to increase the utilization rate allocated to this area. It follows that the underutilization of funds makes the schemes intended for tribes' social and economic advancement limited in their impact.

In relation to housing schemes, we found that 70 per cent of the sampled households received housing support (Figure 4.a.). Also, that 97.4 per cent of the families owned government funded homes (Figure 4.b.). Nonetheless, there were criticisms regarding the housing schemes that vented in two different directions. One related to the need of assuring that homes given under government schemes are well constructed. The other complaint related to the lack of funds needed in order to complete home construction (Fig. 6). It is noteworthy that only 7.8 per cent of the sample expressed high levels of satisfaction with housing schemes (Figure 5).

Likewise, our data indicate that the MGNREGS represented a major share of household income among tribal households, especially for women. Indeed, the MGNREGS represented on average 0.4863 of each rupee household income (Table 5). However, the average income share of the MGNREGS was lower for the tribal groups of Wayanad, as the Paniya derive most of their income from wage labour and the Kuruma from farming their own land. We must also note that 68 per cent of households carrying a job card were willing to work more days than those allowed under the guaranteed work scheme.

In connection to the SHG we found that barely 20 per cent of the households included in our sample were enrolled in the scheme. The Kuruman and Irular household heads expressed the opinion that the scheme was a failure. The respondents pointed to the scheme's inability to generate regular savings, its lack of potential for capital formation and the low labour skills and educational levels prevalent among members. To these constraints, we must add issues such as lack of interaction between tribal and non-tribal populations which was due to the stigmatization of tribal populations. The low enrolment rate in the SHG among Kerala tribes is a matter of serious concern for the scheme represents one of the most important avenues to foster women's capacity building, access to productive resources and enhanced position in the household. One strategy for improving the impact of the SHG would be to create SHG-Cooperative frameworks modelled on those which have been implemented in the coastal areas of Kerala through *Matsyafed*. We refer to fish farms that have been successful in guaranteeing the welfare of fishermen and women by offering members the opportunity to engage in diverse activities such as fishing, commerce, aquaculture, transport and many in-land undertakings (Rajeev & Rajasenan, 2015; Rajasenan, 2016; Rajasenan & Rajeev, 2016).

Respondents were critical of the ICDS. They complained about the irregularity of food supply and the high costs associated to retrieving such foodstuffs. Tribal hamlets are usually located in remote areas, thus creating two problems: problems related to high transportation costs and problems related to having to collect provisions in faraway anganwadis. Most respondents argued that foodstuffs were of low quality. Yet, 74 per cent of mothers with children under the age of three reported being satisfied with the quality of infant formulas.

Overall, the respondents held the view that tribe development programmes were sound. Nevertheless, the beneficiaries raised a number of concerns

regarding the implementation of such plans. They expressed the view that plans needed proper implementation, evaluation and a scaling up of strategies. The most important complaints revolved around significant delays in obtaining financial assistance, flawed criteria in the selection of beneficiaries and insufficient funding of housing schemes.

The exclusion of Indian tribal populations is well beyond the mere experience of being poor. Whereas poverty refers to lack of disposable income, exclusion entails a relative loss of social rights and limited access to essential services such as education, proper housing and health care. Moreover, these indigenous groups often find themselves disempowered and oppressed. Hence, the urgent need to evaluate and monitor tribal development schemes by looking at their tangible impacts. Nevertheless, there is also a requirement to examine a number of additional factors that may contribute to the outcome of development plans: The level of commitment of policy makers, the implementing agencies' mode of governance and the extent of stakeholders' level of participation in development plans.

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