

TAMUL PLATES

SOCIAL IMPACT REPORT:

2014 BASELINE



EXECUTIVE SUMMARY

- Leaf plate producers are highly dependent on Tamul Plates, with income from Tamul Plates-related activities constituting the primary source of income for a vast majority of households across the Lower and Upper Assam Groups. On the other hand, over 75 percent of affiliate unit owners and raw material collectors across respondent groups view income from Tamul Plates as complementary to other sources of income.
- There is significant variability in monthly incomes among Tamul Plate beneficiaries. While affiliate unit owners across both respondent groups earn more than Rs. 10,000 a month, raw material collectors earn less than 50 percent of that.
- Households spend roughly 50 percent of their total monthly expenses on food alone. Expenditure on school for children and miscellaneous (unplanned) expenses form the next two biggest categories. Savings constitute a very small component of total expense for households at 6–7 percent.
- Asset ownership among beneficiaries is largely consistent across the respondent groups. Basic utility assets such as furniture, and productive assets such as mobile phones have high ownership of over 85 percent. However, lifestyle assets' ownership varies, with social prestige items such as bell metal utensils having greater ownership (48 percent of households) in the Lower Assam Group, and entertainment items, such as televisions, being more popular (55 percent of households) in the Upper Assam Group.
- Housing quality of beneficiaries is largely determined by location. Tamul factory workers live in semi-urban areas of Barpeta and therefore have a large percentage staying in permanent houses (44 percent in Lower Assam Group and 50 percent in Upper Assam Group), when compared to other beneficiaries. Across all beneficiaries, better quality material is generally used for pillars (concrete) and roofs (tin), while basic material such as bamboo is used for walls, owing to local climatic conditions.
- School enrolment is encouraging among the beneficiaries, exceeding the national average for both boys and girls. However, only a small percentage of these children (30 percent in Lower Assam Group and 17 percent in Upper Assam Group) attend private school.

INTRODUCTION



Tamul Plates Marketing Private Limited (Tamul Plates) is a producers' initiative, generating livelihoods in rural parts of Northeast India by producing and marketing biodegradable arecanut leaf dinnerware. Tamul Plates empowers village-level entrepreneurs with technological support to develop high-quality disposable plates, and ensures strong market access for sustainable incomes. Over the last four years, Tamul Plates has promoted more than 100 entrepreneurs and thereby generated livelihoods for more than 500 people.

Recognizing the strong work being done by Tamul Plates in the region, Upaya Social Ventures (Upaya) decided in November 2013 to extend financial and technical support for further employment opportunities for rural youth in the Northeast.

OBJECTIVE

With a strong commitment to evidence-backed impact measurement, Upaya, in collaboration with Tamul Plates, developed this Social Performance report to document the economic and social background of the company's beneficiaries. This report provides a snapshot of social metrics for 95 of Tamul Plates' beneficiaries, serving as the baseline for reporting their progress out of poverty over time. A midline (check-in) survey will be conducted after 12 months for the same group of beneficiaries to measure the changes in income levels and quality-of-life indicators.

The findings of this report are pivotal for Upaya and Tamul Plates to inform strategies for continued impact on the most vulnerable communities, while also serving as a valuable resource for readers to better understand the characteristics of the population Upaya's programs are committed to serving and the conditions in which they currently live. Upaya's mission is to support the creation of dignified jobs in order to uplift "ultra poor" communities.

SCOPE

The report is based on household surveys conducted between July 2014 and September 2014 of 95 beneficiaries across ten districts of Northeast India, spanning the states of Assam, West Bengal, and Meghalaya. Beneficiaries were evaluated across key social and economic metrics, including income, education, assets, and expenditure.

BACKGROUND & CONTEXT

Tamul Plates originated in Assam, a strategically placed state in Northeastern India. The name Assam is derived from the word "*asama*," meaning peerless, or unrivalled, in the now-extinct 'Ahom' language. The state's physical beauty does justice to its name, boasting majestic Himalayas, the great river systems of the Brahmaputra and Barak, and the one-horned rhinoceros. Unfortunately, this natural richness is in stark contrast to the social and economic issues that plague the state.

Assam's economy saw weak growth between 2002 and 2012, with Gross State Domestic Product (GSDP) growing by 5.8 percent, far behind the national average of 8.37 percent. Productivity is also exceptionally low, with the agriculture sector contributing a meagre 21.3 percent to the state's GSDP⁵ despite employing roughly 75 percent of the work force.

Employment opportunities are inadequate and inaccessible. Unemployment is extremely prevalent, with the rural male unemployment rate (4.3 percent)⁶ registering as the highest in the country, and rural youth unemployment (16.2 percent) as the second-highest. Alternatives to agricultural employment are focused in major cities, fuelling a prominent urban/rural economic divide, with 86 percent of the state's poor living in rural areas.

This laggard economic growth and skewed development trends are creating a dangerous socio-cultural division in Assam, which threatens to devolve into rising crime, heightened suicide rates, and separatist movements. Recognizing these issues, the founders of Tamul Plates decided to promote non-farm employment opportunities for rural youth, ensuring steady incomes from credible alternatives to agricultural employment.

OVERVIEW OF TAMUL PLATES

Tamul Plates originated as a livelihood programme under Dhriti, a non-profit based in Barpeta, Assam, which promoted arecanut leaf plate-making in the poorest districts of Assam: Baksa, Bongaigon, Barpeta, and Chirang (collectively referred to as 'Lower Assam').

Dhriti's model leveraged grant funding to provide indirect credit support and technical knowledge to low-income households, helping the first few village-level entrepreneurs for leaf plate manufacturing in the region. As per program design, beneficiaries recruited during this period were from extremely poor households.

Over time, the organization's founders recognized that a for-profit model would enable sustainable operations, and so established Tamul Plates in August 2009. This move brought three significant changes in organization strategy. First, a greater focus on creating a strong end-market through coordinated marketing of the disposable arecanut tableware. Second, simultaneous expansion of manufacturing operations, encouraging village-level entrepreneurs in other districts of Assam such as Tinsukia, Lakhimpur, and Cachar (commonly referred to as 'Upper Assam'⁷), and expanding to districts in other states such as Meghalaya (West Garo Hills and Ribhoi Meghalaya districts) and West Bengal (Jalpaiguri district). Third, a transition from indirect credit support for households to facilitating loans through established banks. This shift resulted in enrolment of less indigent households given the need for a relatively higher appetite for risk.

These steps not only streamlined operations from a business perspective, but also enabled Tamul Plates to create a bigger geographical impact. By providing manufacturing technology and market linkages, Tamul Plates has supported 100 village level entrepreneurs across three states in the region and created alternative employment for more than 500 households.

5 International Journal of Modern Engineering Research (IJMER), "Prospect of bioenergy substitution in tea industries of North East India", Vol.3, Issue.3, May-June. 2013, pp-1272-1278. Available at: http://www.ijmer.com/papers/Vol3_Issue3/AC3312731278.pdf. Last accessed December 17, 2014.

6 Hindustan Times, "Hard times: Young and unemployed in India," February 9, 2014. Available at: <http://www.hindustantimes.com/india-news/unemployment-rate-for-youngsters-sees-marginal-rise/article1-1181982.aspx>. Last accessed December 17, 2014.

7 Upper Assam is considered to be the most productive region in the state, boasting an abundance of natural resources like oil and gas, as well as a fledging tea plantation economy.

Tamul Plates is committed to having impact beyond livelihood generation by encouraging adoption of environmentally friendly tableware. Products manufactured by Tamul Plates are 100 percent biodegradable, reducing potential CO₂ production upon discard by 6 kilograms per kilogram of product (the amount of CO₂ produced upon destruction of Thermacol and Styrofoam).

ASSESSMENT METHODOLOGY AND SCOPE

Tamul Plates and Upaya jointly conducted the Social Performance Survey and produced this report in order to assess the socio-economic background of beneficiary households across various metrics. This is a baseline report intended to achieve two primary objectives: to ensure Tamul Plates is reaching out to the targeted beneficiary groups, and to serve as a base to measure future impact through periodic surveys. We intend to track these social metrics of beneficiary households regularly to assess the improvement in income and quality of life.

DATA COLLECTION

Data cited in this report is primary information sourced through detailed surveys of beneficiary households associated with Tamul Plates and collected using the “Social Performance Measurement Schedule“ developed by Upaya. The questionnaire was designed to capture a range of socio-economic and situational parameters at the household level, including demographics, income and employment, family expenditure, housing status and access to amenities, and ownership of assets, such as land and livestock.

In addition to the survey, in-depth unstructured interviews were conducted with respondents from various beneficiary groups. These qualitative interviews were extremely helpful in providing anecdotal evidence and insight into the lives of the sample group, the challenges they face, and the role Tamul Plates plays in their lives. These interviews are featured as profiles in Appendix A.

Surveying for this report was undertaken between July 2014 and September 2014. Surveyors interviewed 95 respondents from 92 households covering 10 districts in the states of Assam, Meghalaya, and West Bengal.

CLASSIFICATION OF RESPONDENTS

Across the analysis presented in forthcoming sections, respondents have been classified based on two defining characteristics: the role each respondent plays within Tamul Plates’ operations and the organization structure the respondent was initiated into.

Each respondent plays one of four job roles within Tamul Plates’ operations: affiliate unit owner, leaf plate producer, Tamul factory worker, and raw material collector/agent.

1. **Affiliate unit owners** are village-level entrepreneurs who own small production units at the village level to manufacture arecanut leaf tableware marketed by Tamul Plates.
2. **Leaf plate producers** are workers employed in individual village production units to handle the cleaning and drying of leaves and to operate the plate-making machines.
3. **Tamul factory workers** are individuals employed at the Tamul Plates central production facility

of leaf plates, based in Barpeta.

4. **Raw material collectors or agents** are individuals and agents supplying raw material, such as arecanut leaf sheaths, to production units.

Each respondent was initiated into either a non-profit organization structure or a for-profit organization structure.

- **‘Lower Assam Group’** refers to early employees who joined while manufacturing functioned as a non-profit operation under the name of Dhritii. These households belong to the poorer districts of Assam, commonly referred to as Lower Assam.
- **‘Upper Assam Group’** refers to newer employees brought in after the shift to the for-profit model and establishment of the company known as Tamul Plates. These households tend to be less poor than those in the Lower Assam group, and are located in three states- Assam (Tinsukia, Lakhimpur, and Cachar districts; commonly referred to as ‘Upper Assam’), Meghalaya (West Garo Hills and Ribhoi Meghalaya districts), and West Bengal (Jalpaiguri district). It should be noted that the classification of “Upper Assam” is not geographically and administratively representative as it clubs districts from other states.

<i>RESPONDENT CATEGORY</i>	<i>UPPER ASSAM GROUP</i>	<i>LOWER ASSAM GROUP</i>	<i>TOTAL</i>
Affiliate Unit Owner	3	14	17
Leaf Plate Producer ⁴	13	32	45
Leaf Collector or Agent	4	29	33
Grand Total	20	75	95

Fig 1.1 Categories of respondents for the survey

It is important to note that Lower Assam Group households have already experienced improvement in quality of life and improvement in incomes given their longer tenure of working with Tamul Plates. Upper Assam Group households, on the other hand, are relatively new recruits, so this assessment may not yet reflect benefits from Tamul Plate employment. While this report will not be able to assess the progress made by the Lower Assam Group through Tamul Plates initiatives to date, it will establish a baseline assessment for all beneficiaries in current time. Subsequent social performance reports will track all households’ progress and improvements in their quality of life as a result of their work with Tamul Plates. Acknowledging the fundamental difference in enrolment of each of these beneficiary groups, we will refrain from comparing indicators across these two groups.

⁴ Leaf plate producers here refers to workers in the Tamul factory as well as those employed at the various village level affiliate units. For the purposes of this report we surveyed 13 workers of the Tamul Factory and 32 workers working at the village level affiliate unit.

FINDINGS

The key findings of this assessment are presented by respondent type; divided into Lower Assam Group (LAG) and Upper Assam Group (UAG).



LOWER ASSAM GROUP

This section covers the performance of Lower Assam Group households. 75 beneficiaries from four districts were surveyed as part of this group on various socio-economic indicators like income, asset ownership, household expenditure patterns, education for children under 17, and access to services. These indicators are indicative of the quality of life enjoyed by these households.

EDUCATION

Literacy Rates Among LAG Beneficiaries

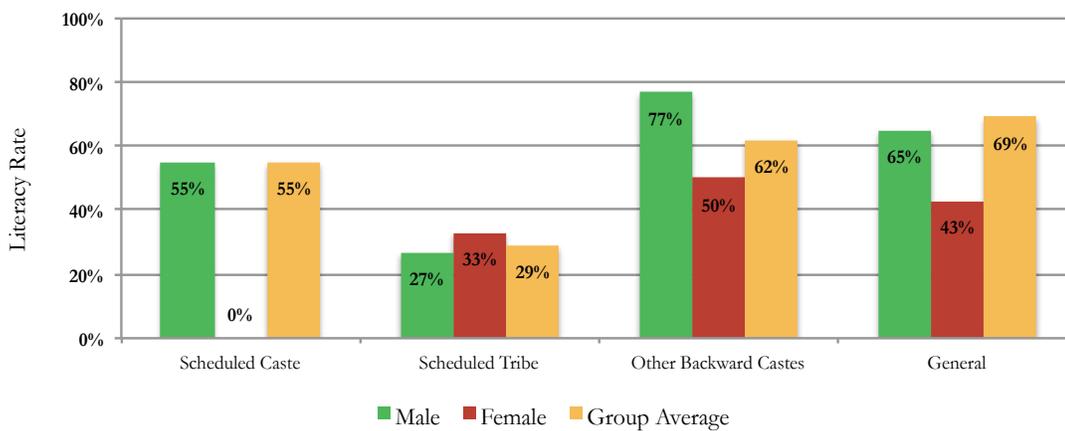


Fig 2.1 Literacy rate among Lower Assam beneficiaries based on caste classification

Beneficiaries in the Lower Assam Group exhibit skewed literacy levels for both the Scheduled Tribes (ST) and the Scheduled Caste (SC). The group average literacy rate for the SC/STs is much lower than the General and Other Backward Castes (OBC) categories. The group's average literacy rate of 29 percent⁵ is significantly lower than the state average literacy rate among STs, which is 80.5 percent. Similarly, while the state average for SCs is 83 percent, the group average stands at 55 percent. Female literacy rate is lower overall than the male literacy rate among all caste groups, with the exception of ST.

PROGRESS OUT OF POVERTY™

The Progress out of Poverty™ Index (PPI) is an easy-to-use poverty measure developed by Grameen

⁵ National Institute of Rural Development & Panchayati Raj, "Rural Development Statistics: Scheduled Castes & Scheduled Tribes," 2011-12. Available at: <http://www.nird.org.in/Rural%20Development%20Statistics%202011-12/data/sec-10.pdf>. Last, accessed on January 16, 2015.

Demographics of the Lower Assam Group

By gender:

Male - 60
Female - 15

By caste:

General- 21
Scheduled Caste- 11
Scheduled Tribe- 14
Other Backward Caste - 29

Foundation that allows organizations to assess and track changes in poverty rates among beneficiaries over time.

The PPI Scorecard comprises 10 questions that cover a wide variety of household parameters such as primary income source, number of children, and asset ownership (e.g., TV, almirah/dressing table, bicycle). Scores associated with each response determine the aggregate PPI score for a household, which ranges from 0 (most likely to be below poverty line) to 100 (least likely to be below poverty line).

It is important to note that the PPI score is not an indication of actual poverty level but is the likelihood of a household to fall below the poverty line.

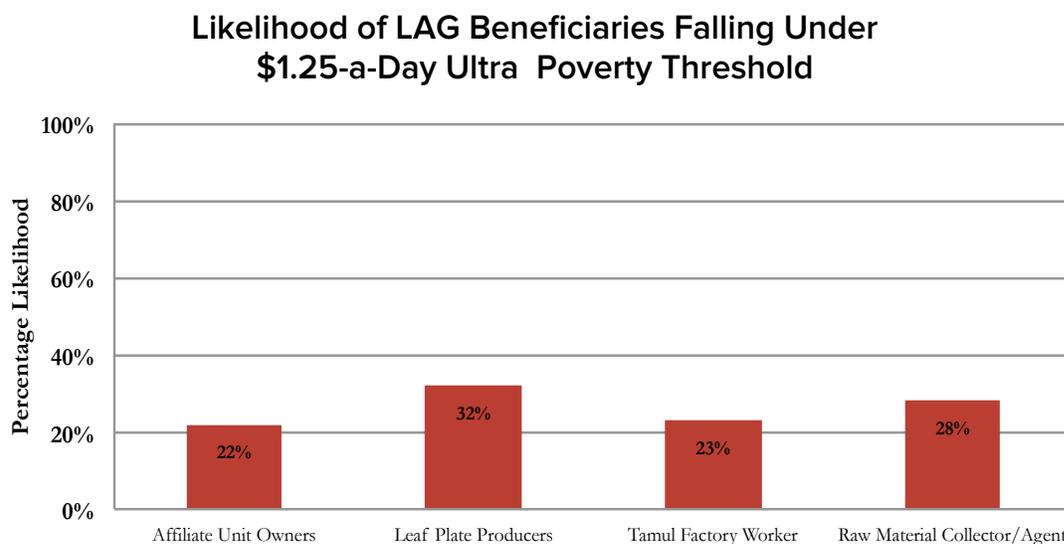


Fig. 2.2 Poverty likelihood for Tamul Plates beneficiaries based on PPI scores

Fig. 2.2 represents the likelihood of beneficiaries in four different Tamul beneficiary groups falling below the \$1.25-a-day poverty line [2005 PPP]⁶. Overall, the sample group shows a low likelihood of falling below the poverty line. Households that work as leaf plate producers for village-level affiliate units have the highest likelihood among those surveyed of falling below the \$1.25-a-day threshold. Village-level affiliate unit owners have the lowest probability of falling below the poverty threshold.

INCOME AND PRODUCTIVITY

Income is perhaps the most important metric to measure the quality of life in rural Assam. A majority of households in the area undertake agricultural activities to meet domestic food consumption; they either own land or work for others. This consumption is supplemented by cash-based income sources to provide disposable income, which in turn determines the uptake of services, such as quality healthcare, education, and purchase of productive, utility, or lifestyle assets.

Following this understanding of income generation in the region, income can be distinguished based on primary source and secondary source. Primary source refers to the dominant activity bringing income to the household, while secondary source refers to all supplementary activity undertaken.

This section differentiates the sources of income data for the three categories of Tamul Plates-related

⁶ The PPI Lookup Table for India can be found at <http://www.progressoutofpoverty.org/country/india>

employment: affiliate unit owners, leaf plate producers (including Tamul Factory workers), and raw material collectors.

AFFILIATE UNIT OWNERS

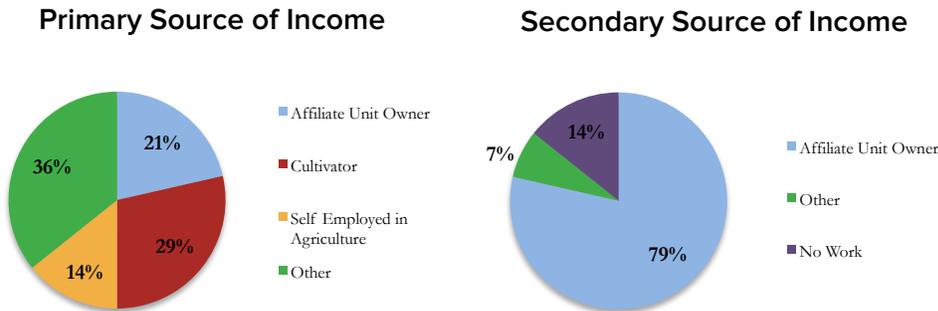


Fig. 2.3 Primary and secondary income sources for affiliate unit owners

Among the affiliate unit owners, 79 percent indicated that operating the village production unit is their secondary source of income. Only 21 percent of the beneficiaries in this category reported income from Tamul Plates as their primary income source. For a majority of these households, agricultural work — either on their own farms or others’ farms (cultivator) — remains the primary income source and occupation. Therefore, it can be inferred that for these beneficiaries, expenditure in setting up and operating the affiliate unit is seen as an investment activity, and any income from these units complements other traditional and more central income sources.

LEAF PLATE PRODUCERS

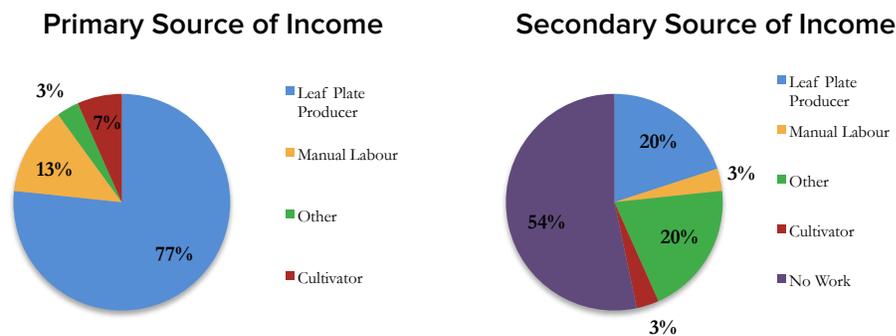


Fig. 2.4 Primary and secondary income sources for Leaf Plate Producers

For 77 percent of the leaf plate producers, income from working at the affiliate unit or Tamul Plates factory constitutes their primary source of income. In comparison to manual labour work, the income from Tamul sources is not only fixed but also predictable. Also, it is pertinent to note that more than half (54 percent) of the beneficiaries reported having no secondary income source. This implies that beneficiaries either do not need a secondary income source or that employment in the form of leaf plate production is the best and/or only option available to them. In both of these cases, the data points to leaf plate producers’ high level of dependency on income from Tamul sources.

RAW MATERIAL COLLECTORS

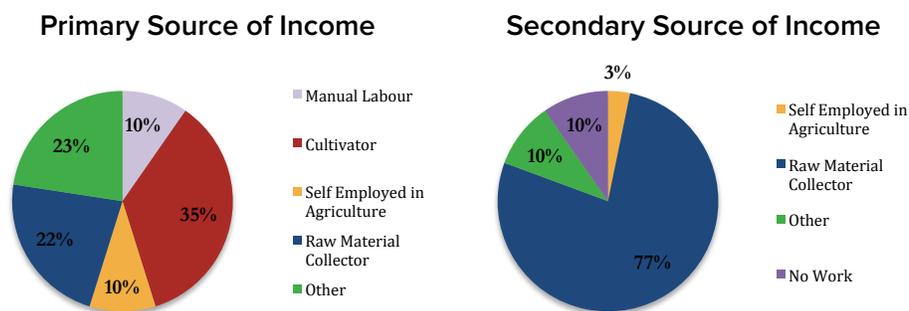


Fig. 2.5 Primary and secondary income sources for raw material collectors

Raw material collectors tend not to rely on income from Tamul Plates as their primary income source. As in the case of affiliate unit owners, most beneficiaries (77 percent) identified Tamul-related income as supplemental to income from traditional sources. The seasonal availability of arecanut leaves is one of the reasons for this trend; beneficiaries can engage in this activity full-time only during certain parts of the year. Even when available, gathering the leaves and supplying them to the production units does not consume too much time, allowing households to continue with other full-time work.

Average Monthly LAG Household Income

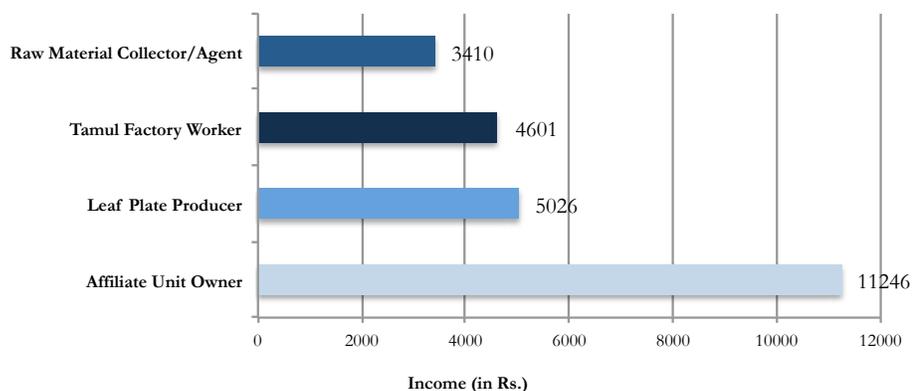


Fig. 2.6 Average monthly household income for Lower Assam Tamul households

On average, the village-level affiliate unit owners have the highest monthly household income (Rs. 11,246) among all the beneficiary categories. Income from Tamul sources is supplementary for the affiliate unit owners, and as such is treated as an investment opportunity to shore up their cash-based income sources. For the leaf plate producers and Tamul factory workers, who rely more heavily on their Tamul income source, the average monthly household income is Rs. 4,600-5,000.

HOUSEHOLD EXPENDITURE

The most important expense for households is food. Households living at subsistence levels of income spend 40-50 percent of their income on food. Many studies have noted that with an increase in income, the percentage share of food expense decreases due to increased spending on services such as health and education.⁷ In monetary terms, households from the surveyed group tend to spend close to Rs. 4,126 on food every month.

⁷ For more, refer to Economic Research Service/USDA "Growth and Equity Effects of Agricultural Marketing Efficiency Gains in India / ERR-89: Household Income and Expenditure Patterns," December 2009. Available at: http://www.ers.usda.gov/media/428179/err89e_1.pdf. Last accessed December 20, 2014.

LAG Household Average Monthly Expenditures

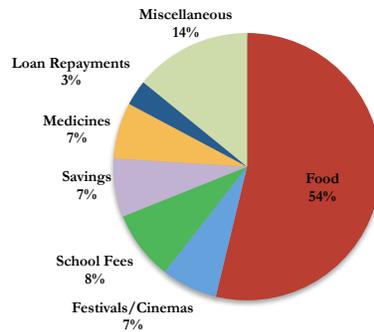


Fig. 2.7 Breakdown of household monthly expenditure

With respondents in the Lower Assam Group allocating 54 percent of their total monthly household spending on food, there is a clear need to improve the food-to-non-food expenditure ratio. This would mean a higher allocation for expenses towards school fees (education), medicines (health), and other miscellaneous expenditure. Tamul Plates aims to offer them an increase in disposable income, and as a result, an increase in their share of non-food expenditure as a proportion of total household expenditure.

The respondents in this group report a low level of household savings. Lower Assam Group households are saving only 7 percent of total expenditure on average, which translates to Rs. 540 every month. This low level of savings is prevalent across the group, with nearly 40 percent of households not having any form of savings at all. These figures emphasize that the income being earned is the bare minimum needed for the households to survive. There is a critical need to boost income and increase financial security within the region through savings.

ASSET OWNERSHIP

Household assets can be broadly categorized into three types:

- **Utility assets:** These assets are the most basic necessities for all households, signifying a minimum level of quality of life. Examples include beds, chairs, and water purifiers.
- **Productive assets:** These assets can be used for productive purposes to derive economic benefits. Examples include mobile phones, handlooms, two-wheelers, and tractors.
- **Lifestyle assets:** These assets are typically purchased either as status symbols or as luxury items, and tend to be the most expensive among all assets. Examples include radios, televisions, and expensive metal utensils.

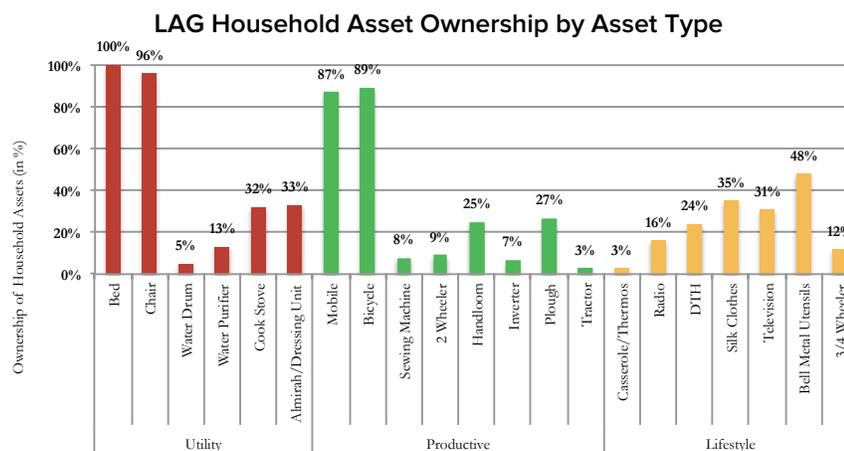


Fig. 2.8 Distribution of household assets based on asset type

Interesting trends in the distribution of household assets are represented in Figure 2.8, including the following observations.

- Utility assets are the most popular asset type for the Lower Assam Group. Items of everyday use like beds and chairs have near-universal ownership. However, it is interesting to note that two low-cost utility assets — water drum and water purifier — have the smallest ownership percentages in the category. This can be attributed to the abundance of potable water in the region that requires no storage or purification.
- Cook stoves as a utility asset do not seem to have high acceptance in this region. Households tend to prefer the traditional firewood cook stoves. This is primarily due to the high cost of clean fuel sources and a proximity to forests that provides an abundance of firewood.
- Among productive assets, inexpensive assets such as mobiles and bicycles have more than 85 percent ownership. However, the more expensive productive assets such as inverters, tractors, and two-wheeler are less common.
- Expectedly, lifestyle assets have the lowest percentage of ownership among the surveyed group. Medium-cost assets like televisions, bell metal utensils, and silk clothes are among the few assets with high ownership, as they are seen as a status symbols in this area.
- There is negligible ownership of high-cost lifestyle assets such as three- or four-wheelers.

Overall, the cost of the asset is the primary factor that determines their purchase in the surveyed households. Low- and medium-cost assets like chairs, beds, mobiles, bicycles, and TVs are some of the most popular assets among these households.

LANDHOLDING PATTERNS

Agriculture is an important economic activity in Assam, providing employment to nearly 75 percent of the population. However, the sector is not adequately productive, characterized by low yield levels resulting in lack of self-sufficiency. Since approximately 40 percent of the respondents in the Lower Assam Group reported agricultural sources to be either a primary or secondary source of income, it is useful to look at these activities more closely.

Based on the landholding patterns, as gleaned from the data, it is possible to categorize these households into four categories:

- **Landless:** These households own no land and work on larger farms as laborers to earn a subsistence living. Such households tend to fall under the \$1.25-a-day poverty line.
- **Small and marginal farmer:** These farmers hold up to two acres of land. Their holdings are characterized by low agricultural output and minimal marketable surplus.⁸
- **Medium farmer:** These farmers own between two and five acres of land. They use this land not just to feed their families but also to grow vegetables and fruits that can be sold locally.
- **Large farmer:** These farmers own more than five acres of land and are able to use economies of scale with machinery and fertilizers. These inputs also allow them to increase output, improve overall productivity levels, and produce greater marketable surplus from their land.

Of the total surveyed beneficiaries in the Lower Assam Group, 32 percent are landless and 39 percent are small and marginal farmers. These households typically work as cultivators (or laborers) on others' farms to earn livelihoods, as the land they own (if any) does not produce any marketable surplus to provide them with an additional source of income. Large farmers are an extremely small proportion (9 percent) of the total households surveyed in this group. It is for these beneficiaries that farming can be considered a remunerative economic activity.

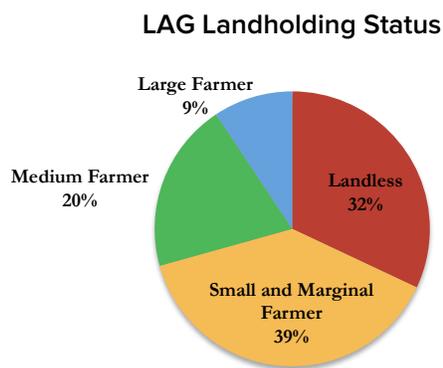


Fig. 2.9 Landholding patterns based on land-size classification

HOUSING AND ACCESS TO AMENITIES

ELECTRICITY

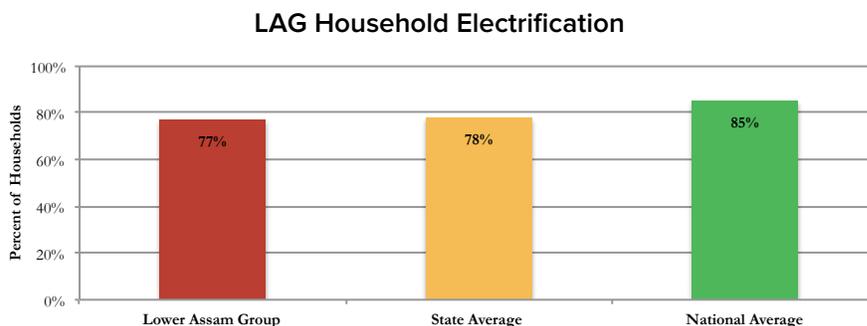


Fig. 2.10 Electrification rate for Lower Assam Group

77 percent of Lower Assam Group households have access to electricity, in line with the state average of rural electrification of 78 percent.⁹

⁸ Marketable surplus is the portion of a harvest that a farmer can sell on the market to earn a profit. With this profit she can reinvest into farming operations by purchasing more land or better farming equipment.

⁹ Assam Directorate of Economics and Statistics, "Economic Survey, Assam," 2011-12. Available at: http://ecostatassam.nic.in/ads_economic%20survey.pdf. Last accessed December 17, 2014.

It is important to caveat that electrification only represents access to an electrical connection and not a regular supply; blackouts and brownouts are major problems in Assam. According 2011 Government of India estimates, 27 percent of the state’s energy requirement remains unmet.¹⁰ This unmet demand results in constant power cuts, requiring Tamul Plates to continue powering operations with cooking gas/ liquefied petroleum gas instead of electrified machines, which would contribute to lower costs and more eco-friendly manufacturing.

WATER

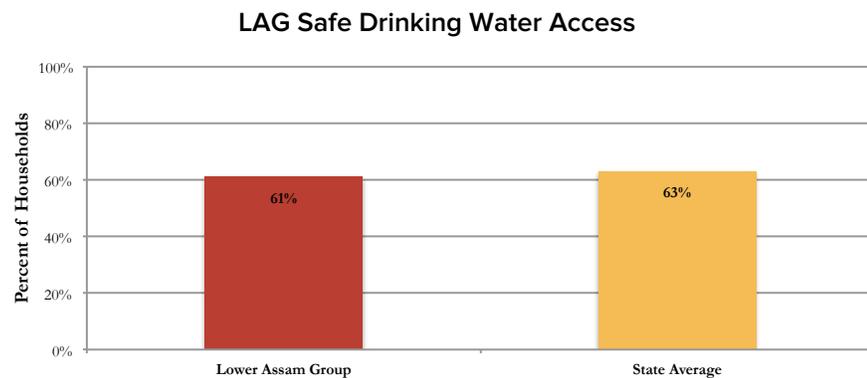


Fig. 2.11 Access to safe drinking water

With easy access to and availability of water across Assam, it is no surprise that 61 percent of households reported access to safe drinking water. 53 percent of the households had access to private hand pumps or taps, and 100 percent of households reported that travel to the nearest source would take fewer than 15 minutes.

SANITATION

Access to sanitation is measured by the quality of facilities available to different households. ‘Improved sanitation facilities’ are defined as those that hygienically separate human excreta from human contact, including flush toilets (with sewer connection), pit latrines with slab, composting toilets, and ventilated improved pit latrines. ‘Basic sanitation facilities’ include other facilities, including open pits, public toilets, and hanging toilets.

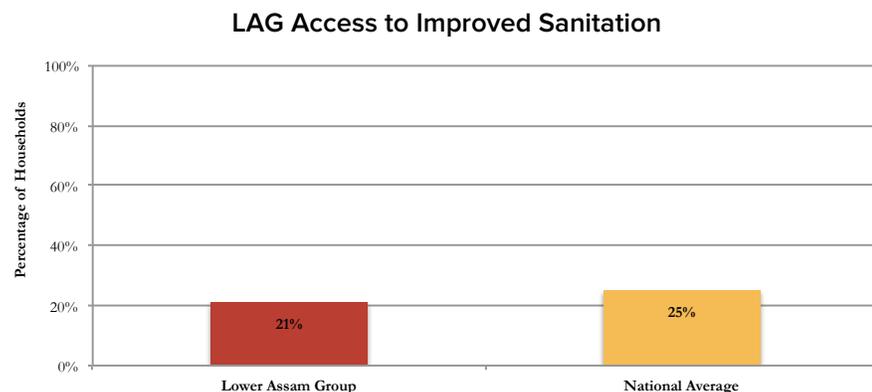


Fig. 2.12 Access to improved sanitation facilities

¹⁰ Deb Chattopadhyay, 2012, Electrification in Remote Villages of Assam (India): Issues and Case Studies, University of Brisbane. Available at: http://www.academia.edu/2967588/Rural_Electrification_in_India_-_Economic_Modelling_of_Renewable_and_Grid_Connection_Options. Last accessed December 17, 2014

According to World Bank estimates,¹¹ only 25 percent of the rural households in India have access to improved sanitation facilities, resulting in the majority of the population using basic sanitation facilities, or in many cases resorting to open defecation. In the Lower Assam Group, the percentage of households with improved sanitation is even lower, at 21 percent.

Adoption of better sanitation facilities is largely dependent on the incomes of the households in a given area, as well as the geographical and cultural context of their locations. As Figure 2.13 makes clear, a greater proportion of improved sanitation facilities are used by the affiliate unit owners, as compared to the leaf collectors and affiliate unit workers, a discrepancy largely driven by higher incomes. The exception to this is the Tamul factory workers, who despite lower incomes refrain from open defecation, as they are based within the semi-urban limits of Barpeta.

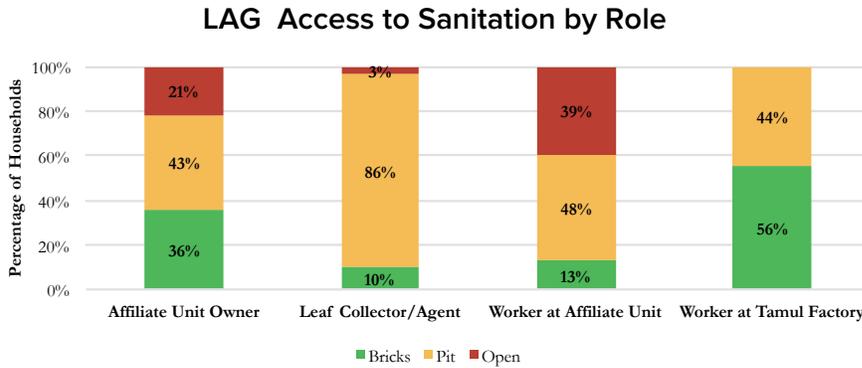


Fig. 2.13 Sanitation facilities available for households

HOUSING STRUCTURE AND QUALITY

Housing quality and structures are indicative of the long-term financial security of a household. Increased housing quality is often a high priority of the rural poor, but high costs mean that improvements are undertaken over a long period of time. The quality of housing is usually a lagging indicator relative to change in income.

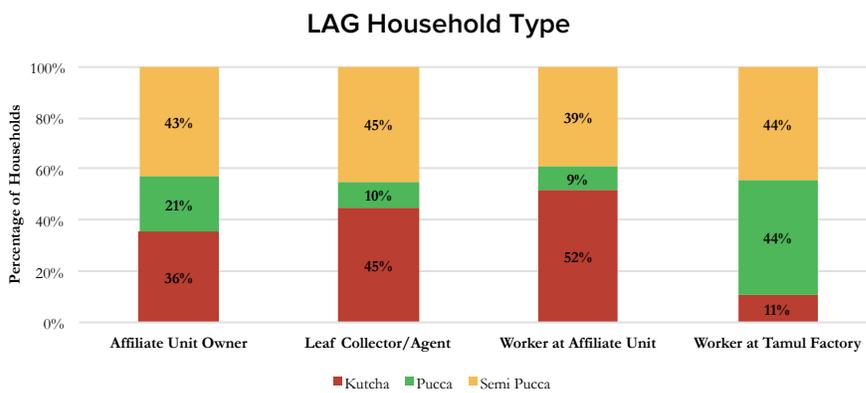


Fig. 2.14 Distribution of housing type

Within the Lower Assam Group, the trend holds true, with 21 percent of affiliate unit owners having *pucca*¹² houses, nearly double the rate of leaf collectors and affiliate unit workers. Meanwhile, 44 percent of Tamul factory workers have *pucca* houses due to their location within the limits of Barpeta. Where

11 The World Bank, “Improved sanitation facilities (% of population with access).” Available at: <http://data.worldbank.org/indicator/SH.STA.ACSN/countries/1W-IN?display=graph>. Last accessed December 18, 2014.

12 *Pucca* houses are structures whose walls and roofs are both made of building materials such as cement, concrete, kiln burnt bricks, tiles, or tin/corrugate sheets.

pucca houses are less common, *kutchha*¹³ houses increase, with *semi-pucca*¹⁴ remaining largely consistent across respondent categories.

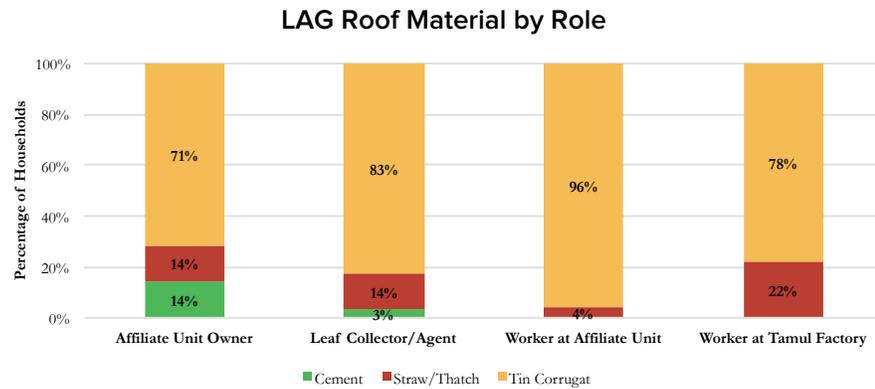


Fig. 2.15 Type of roof material used

The influence of income levels on housing continues to be an important characteristic when assessing roof quality. Assam is prone to extremely high rainfall, forcing households to adopt strong material, such as tin and cement where possible. While corrugated tin sheets are by far the most common material, being used by over 70 percent of households surveyed across respondent type, 14 percent of affiliate unit owners have cement roofs. This desire to adopt stronger roof material, as income increases, will be an interesting area to track in future reports.

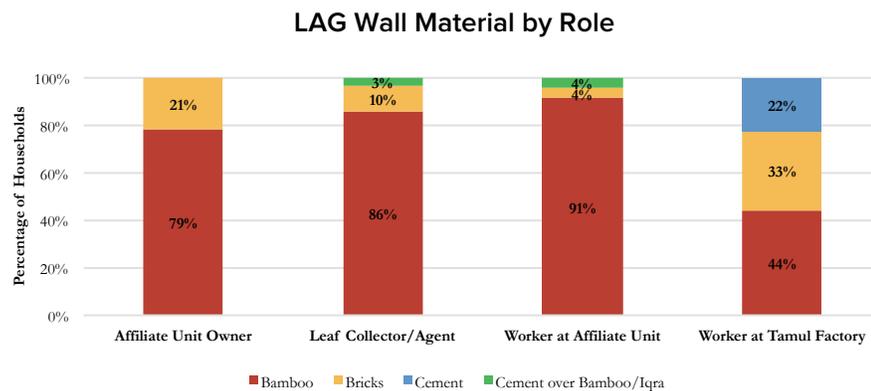


Fig. 2.16 Type of wall material used

Assessment of wall and pillar materials makes it clear that Tamul factory workers prioritize permanent building materials given their location within Barpeta. 89 percent of these respondents use concrete pillars, and 55 percent use either brick or cement for walls. This is in stark contrast to other respondents, who had pillars made from concrete, wood, or bamboo, and walls made largely with locally abundant bamboo. Because of its high fibre content and durability, bamboo is preferred as a wall material among by households where heavy rainfalls and floods are likely to occur.

13 According to the National Sample Service Organization (NSSO), *kutchha* house refers to the kind of building structure that is non-permanent in nature. It is a structure whose walls and roofs are both made of non-*pucca* materials such as un-burnt bricks, bamboo, mud, grass, leaves, and reeds.

14 *Semi-pucca* houses are those that use at least one *pucca* material in the construction of either the roof or the wall. These are the most commonly found housing structures in villages of India.

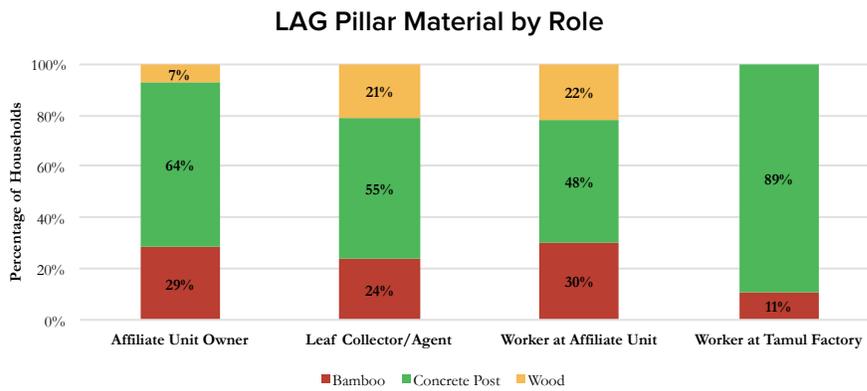


Fig. 2.17 Type of pillar material used

NUTRITION SECURITY

The Lower Assam Group beneficiaries, despite coming from some of the poorest districts in northeastern India, have a well-balanced diet. More than 75 percent of households reported eating non-vegetarian food more than three times in a month, while all households consumed at least one kind of pulse. Staples like potato, tomato, and onion are part of all households' meals, along with seasonal vegetables like okra, jackfruit, yam, and leafy greens. Households predominantly consume rice and wheat as their preferred choice of food grains. Consumption of milk and milk products is rather low, with low cattle ownership and high market rates for these goods. With the inclusion of pulses, grains, seasonal/leafy vegetables, and high frequency of meat/fish consumption, these households have nutritious dietary habits.

SCHOOL-GOING PATTERNS

It is a universally accepted truth that education is the most important lever for economic, social, and political transformation. A well-rounded education is a powerful catalyst that empowers children with knowledge and skills, enabling them to push their families out of the vicious circle of low-paying jobs and low standards of living.

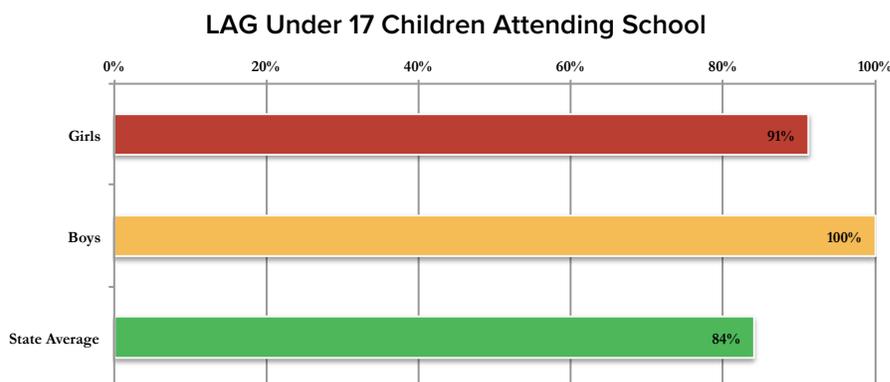


Fig. 2.18 School enrolment rates for children under 17 years old

The aspiration of the Lower Assam Group to break out of the clutches of poverty is evident. Among beneficiaries, 95 percent of children under 17 years old are enrolled in schools, far exceeding the state average of 84 percent. It is also extremely encouraging to see the minimal gender bias, with 91 percent enrolment rate for girls, compared with 10 percent for boys.

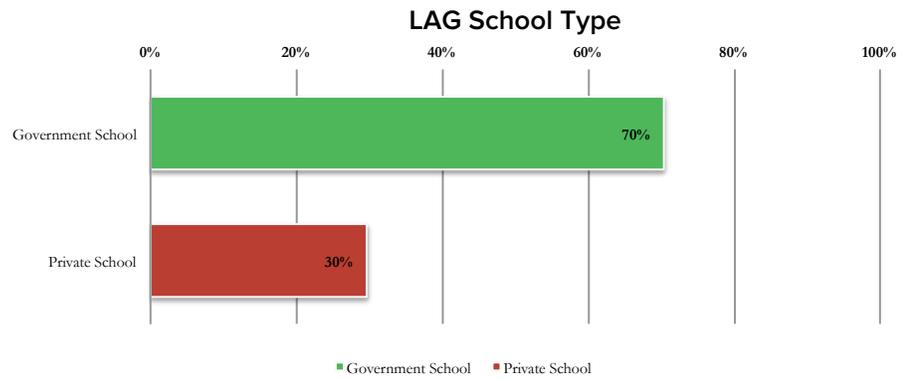


Fig. 2.19 Type of school attended by children younger than 17 years

Also, it is noteworthy that 30 percent of the children from the surveyed group attend private school, which demonstrates the beneficiaries' commitment to their children's future. Private schools are believed to offer a higher quality of education in the region than public schools. Surveyed households regularly stressed the need to earmark income from Tamul-related work for exclusive use on private school fees, academic books, and extra-curricular activities for their children.

LOWER ASSAM GROUP CONCLUSIONS

- Leaf plate producers and raw material collectors with PPI scores of 32 percent and 28 percent respectively are the most likely among Lower Assam Group beneficiaries to fall below the poverty line.
- Tamul Plates-related activities are the primary source of income for 77 percent of leaf plate producers, highlighting their heavy reliance on Tamul Plates. However, over 75 percent of affiliate unit owners and raw material collectors treat income from Tamul Plates as complementary to other sources of income.
- 95 percent of children of school-going age are currently enrolled in school, higher than the state average of 84 percent. 30 percent of these children attend private school.
- Food constitutes the highest percentage of household expense, at 54 percent. Meanwhile, only a meagre 7 percent of monthly expense outlay goes towards savings.
- Less than 20 percent of beneficiaries living outside Barpeta reside in permanent housing structures (*pucca*), owing to the use of inferior materials such as bamboo and tin. However, 44 percent of Tamul factory workers live in permanent structures owing to their location within Barpeta.
- With 77 percent of houses electrified, and 61 percent of respondents having access to safe drinking water, access to utilities among the Lower Assam Group is more or less in line with the state average.

UPPER ASSAM GROUP

EDUCATION

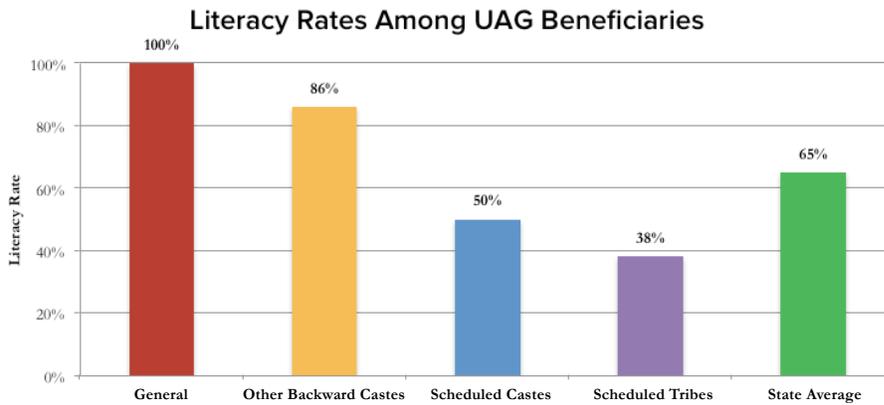


Fig. 3.1 Literacy rate among Upper Assam beneficiaries

Educational attainment as reflected by the literacy rate for the various caste groups shows wide disparities. While 100 percent of the men in the general population are literate,¹⁵ the corresponding rate for Scheduled Tribes (ST) is abysmally low at 38 percent. For Scheduled Caste (SC) it stands at 50 percent (as seen in Figure 3.1). The literacy rate for these two caste groups is also lower than the state average of 65 percent.¹⁶ It appears that respondents in the general and OBC categories have a higher level of educational attainment than the other groups and the state average.

PROGRESS OUT OF POVERTY™ (PPI)

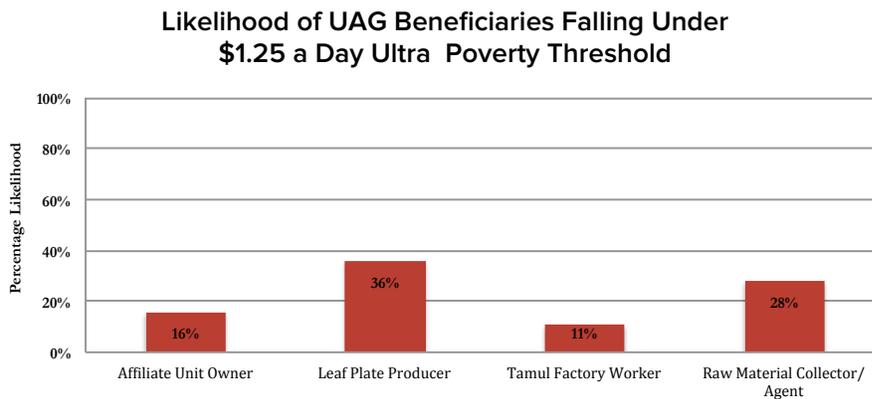


Fig. 3.2 Poverty likelihood for Tamul beneficiaries based on PPI Score

Data presented in Figure 3.2 shows the poverty likelihood for various beneficiary groups based on the \$1.25-a-day-per-person (2005 PPP) poverty line. Among those surveyed, the leaf plate producers have the highest likelihood (36 percent) of falling below the poverty threshold, followed by raw material collectors (28 percent). The affiliate unit owners have among the lowest probability of falling below the poverty threshold.

15 For the respondent group with only one woman beneficiary, a gender analysis of educational attainment doesn't hold too much value. Literacy rates in this section correspond to male literacy rates.

16 According to national census data, overall literacy rate in Assam for the year 2011 stands at 65 percent, while male literacy rate is much higher at 75 percent.

Demographics of the Upper Assam Group

By gender:

Male - 19
Female - 1

By caste:

General- 3
Scheduled Caste- 2
Scheduled Tribe- 8
Other Backward Caste - 7

INCOME AND PRODUCTIVITY

AFFILIATE UNIT OWNERS

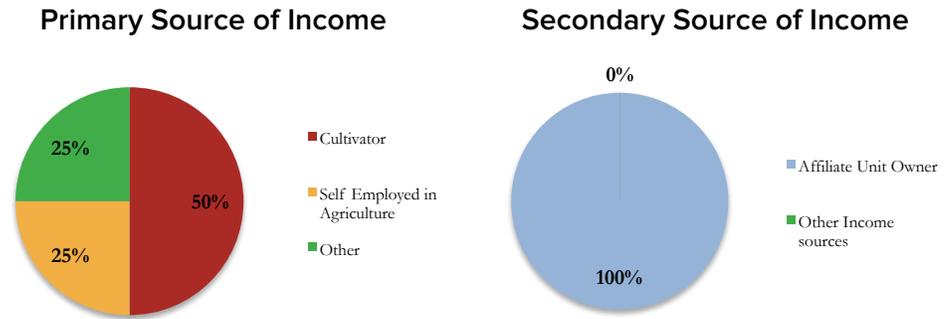


Fig. 3.3. Primary and secondary income sources for affiliate unit owners

Figure 3.3 shows that income from Tamul activities comprises secondary income for affiliate unit owners, with primary income for 75 percent of respondents coming from agricultural activities. The Upper Assam Group, given its relatively strong economic situation, views the village-level production unit as an opportunity to invest and diversify their income sources for greater economic stability.

LEAF PLATE PRODUCERS

Income from Tamul is crucial for this category of employees; it serves as the primary income source for 55 percent of households. Figure 3.4 illustrates how 64 percent of the beneficiaries reported doing no other work to complement their existing income sources, demonstrating extremely high dependency on Tamul-related income. Tamul is creating financially secure alternatives to agricultural employment; the strong need for such alternatives has driven high enrolment.

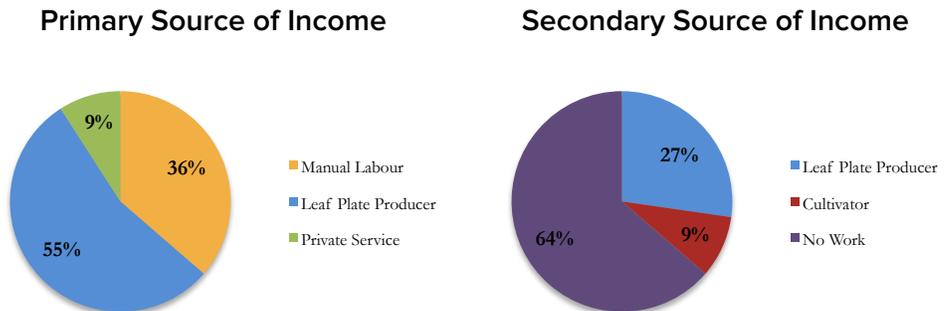
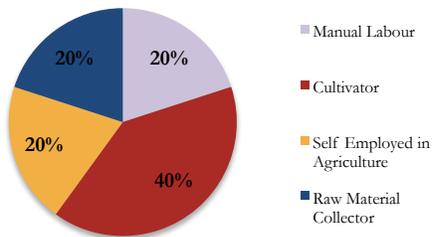


Fig. 3.4 Primary and secondary income for leaf plate producers

RAW MATERIAL COLLECTORS

For raw material collectors, collecting arecanut leaf sheaths and supplying them to Tamul production units provides a supplementary income source. Leaf collection is not a daily activity and requires only limited time, providing ample opportunity for individuals to pursue other income sources. However, income from supply of raw materials crucially boosts disposable income for beneficiaries, allowing them to increase consumption of services like education and healthcare.

Primary Source of Income



Secondary Source of Income

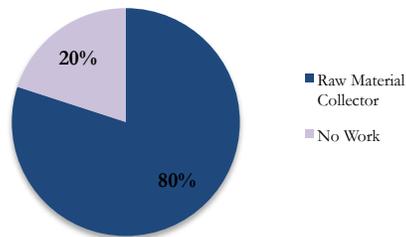


Fig. 3.5 Primary and secondary income for raw material collectors

Tamul-related income is often considered a secondary source due to the fact that the village-level production units and Tamul’s own factory in Barpeta do not operate year-round. Production stoppages are due to the seasonality of raw materials, lack of working capital, and insecurity in a strife-torn region.

Average Monthly UAG Household Income

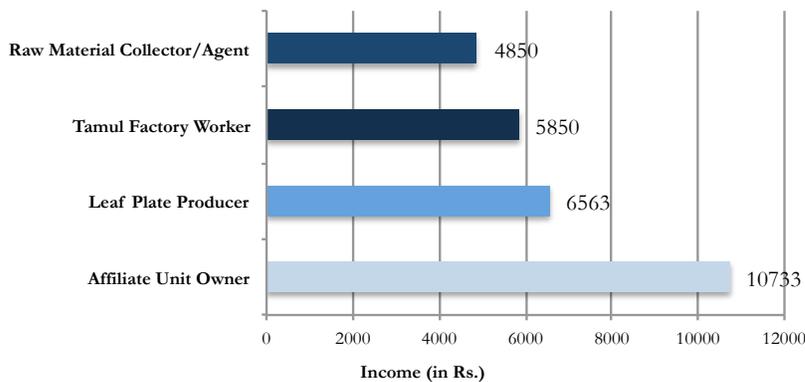


Fig 3.6 Average monthly household income for Upper Assam Tamul households

On average, the village-level affiliate unit owner has the highest monthly household income (Rs. 10,733) among all the beneficiary categories. For the leaf plate producers and Tamul factory workers, who rely more heavily on their Tamul income source, the average monthly household income is Rs. 5,800–6,600 (as illustrated in Figure 3.6).

HOUSEHOLD EXPENDITURE

UAG Household Average Monthly Expenditures

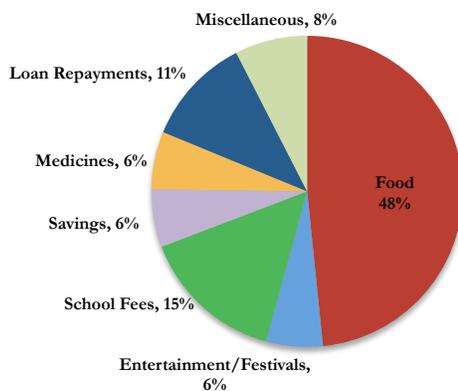


Fig. 3.7 Breakdown of household monthly expenditure

Food accounted for the largest portion of the Upper Assam households' total monthly expenditure, at 48 percent.¹⁷ In monetary terms, households spend close to Rs. 3,800 each month on food alone, in line with the national average for a family of five.¹⁸

It is encouraging to see 15 percent of expenditure going towards school fees and tuitions, demonstrating a focus on ensuring quality learning for children in these households.

Overall, households exhibit high consumption patterns: food, miscellaneous activities, festivals, and entertainment amount to 62 percent of the total household expenditure. Concurrently, savings are extremely low, with only 6 percent of expenses accounted for as savings — less than 10 percent of the expenditure on food.

ASSETS HOLDING PATTERN

Asset ownership patterns demonstrate a strong relationship between income and type of asset. Low-income households have higher ownership of low- and medium-cost utility and productive assets.¹⁹ With an increase in income, it is likely that households would switch from purchasing utility assets to medium- and high-cost lifestyle and productive assets.

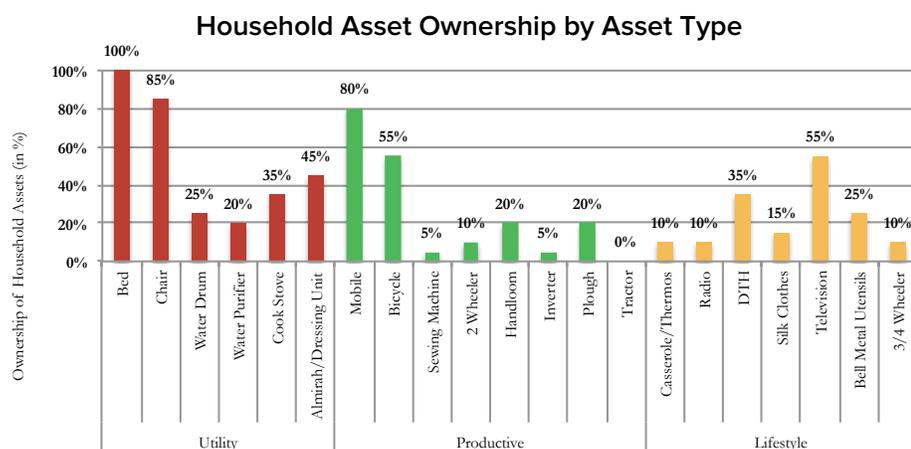


Fig. 3.8 - Distribution of household assets based on asset type

There are a few trends in asset ownership worth noting from the data presented in Figure 3.8:

- Utility assets are the most common form of assets owned by households in this group. These include low-cost assets like chairs and beds, and medium-cost assets such as almirah/dressing units.
- Households show very low ownership of high-cost productive and lifestyle assets like invertors, ploughs, tractors, or three- and four-wheelers.
- Mobiles and bicycles are among the most inexpensive productive assets. They also have extremely high ownership patterns.
- The most popular lifestyle assets for this group of beneficiaries are televisions and DTHs (cable boxes) since in most cases they are the only form of entertainment available in these villages.

¹⁷ For this group of beneficiaries, the presence of one household (affiliate unit owner) was driving up the average household expenses, including the expense on food and school, and can be seen as an outlier. Therefore, for the purposes of calculating household expenses, that household was removed from the data set.

¹⁸ Ministry of Statistics and Programme Implementation National Sample Survey Office, "Key Indicators of Household Consumer Expenditure in India," 2011-12. Available at: <http://www.indiaenvironmentportal.org.in/files/file/key%20indicators%20of%20household%20consumer%20expenditure%202011-12.pdf>. Last accessed January 30, 2015.

¹⁹ We use the same classification of assets — utility, productive, and lifestyle — as explained in Section 5.4.

Overall, it can be inferred that cost and the utility of the assets are two critical features of an asset these considered by these households when making the decision to purchase.

LANDHOLDING PATTERNS

UAG Landholding Status

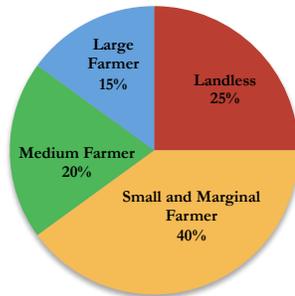


Fig. 3.9 Landholding patterns based on land-size classification

Landholding patterns among beneficiaries of the Upper Assam Group reveal that 40 percent of the households own land of less than two acres, while 25 percent are landless. These beneficiaries’ farming activity is largely for subsistence, resulting in low economic benefit to the households.

The remaining 35 percent of the medium and large farmers in the Upper Assam Group use irrigation techniques on their land. This is significantly higher than the state average of 4.9 percent, but below the national average of 48.3 percent.²⁰

HOUSING AND ACCESS TO BASIC AMENITIES

ELECTRIFICATION

UAG Household Electrification

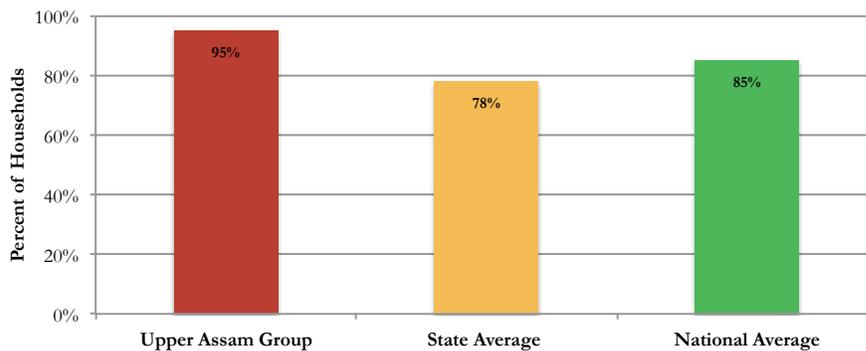


Fig. 3.10 Electrification rate for Upper Assam households

The Upper Assam Group on an average reported a 95 percent electrification rate, significantly higher than both the state average of 78 percent and the national average of 85 percent, based on 2010 estimates.²¹

²⁰ India Spend, “How UP Beats Maharashtra, Gujarat In Agriculture Productivity,” August 20, 2012. Available at: <http://www.indiaspend.com/sectors/how-up-beats-maharashtra-gujarat-in-agriculture-productivity>. Last accessed March 11, 2015.

²¹ Assam Directorate of Economics and Statistics, “Economic Survey, Assam,” 2011-12. Available at: http://ecostatassam.nic.in/ads_economic%20survey.pdf. Last accessed December 17, 2014

It is important to caveat that electrification only represents access to an electrical connection, and not the regularity of supply; blackouts and brownouts are major problems in Assam (as discussed in section 3.5).

WATER

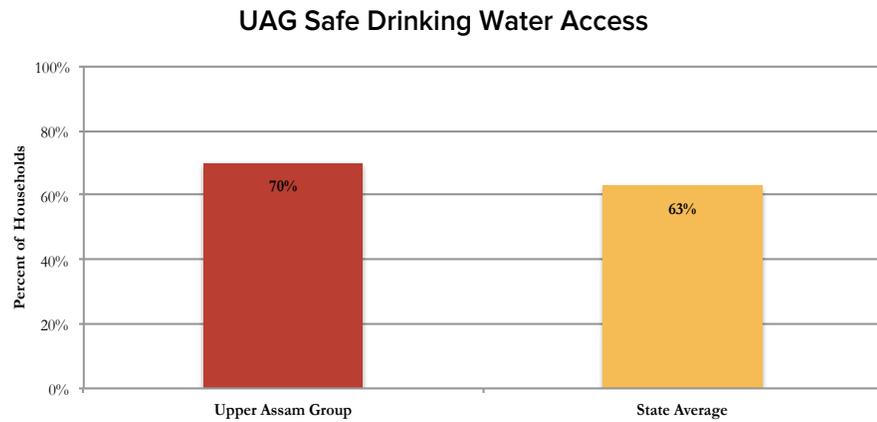


Fig. 3.11 Access to safe drinking water

Due to high groundwater levels (the presence of various water bodies and high precipitation rate), a large percentage of households in Assam have access to safe drinking water.²² 70 percent of households surveyed in Upper Assam Group have access to safe drinking water, higher than the state average of 63 percent.²³ For an overwhelming majority of households in this group (97 percent), the nearest water sources can be reached in fewer than 15 minutes.

SANITATION

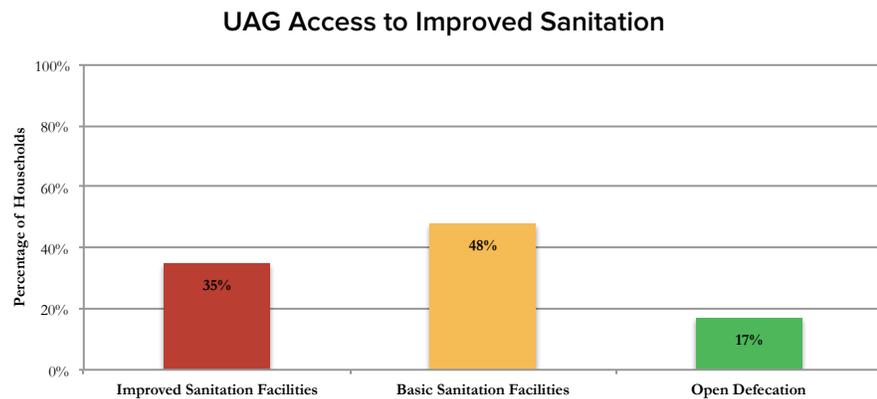


Fig. 3.12 Sanitation facilities available for Upper Assam Group

Figure 3.12 shows 48 percent of Upper Assam group households use basic sanitation facilities through semi-permanent structures, such as open and brick pits, while 17 percent of the households surveyed resorted to open defecation. 35 percent of households have access to improved toilets that dispose human waste hygienically. This number, though significantly higher than the national average of 25 percent, is still alarmingly low and one that should increase with heightened incomes.

²² Includes private handpump, public handpump and private tap

²³ Indian Ministry of Finance, "Economic Survey, Statistical Appendix," 2012-13. Available at: <http://indiabudget.nic.in/es2012-13/estat1.pdf>. Last accessed March 11, 2015.

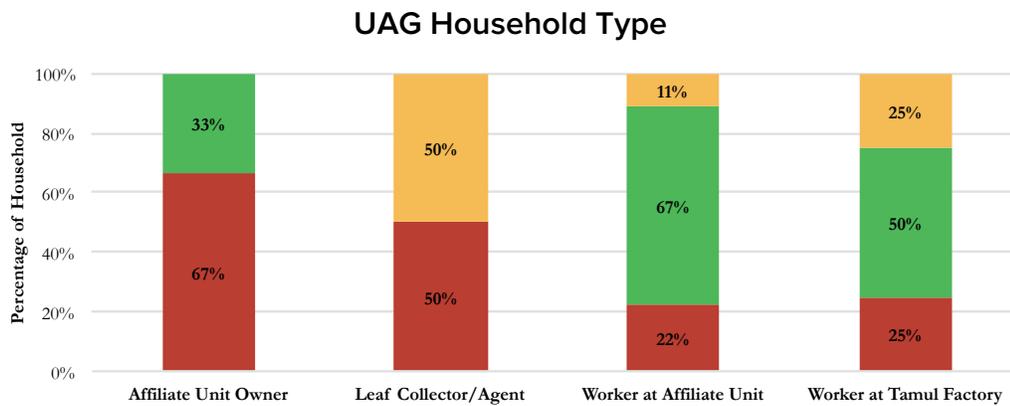


Fig. 3.13 Distribution of house type

Households in Upper Assam Group exhibit a non-linear trend in housing type and quality. The survey results reveal that 45 percent of the beneficiaries live in *pucca* houses, while the remaining 55 percent live in either *kutcha* or *semi-pucca* houses. As housing construction and improvement is a long-term expense and activity, beneficiaries may believe in making building changes in a piecemeal fashion rather than changing wholesale from a *kutcha* house to a *pucca* permanent house.

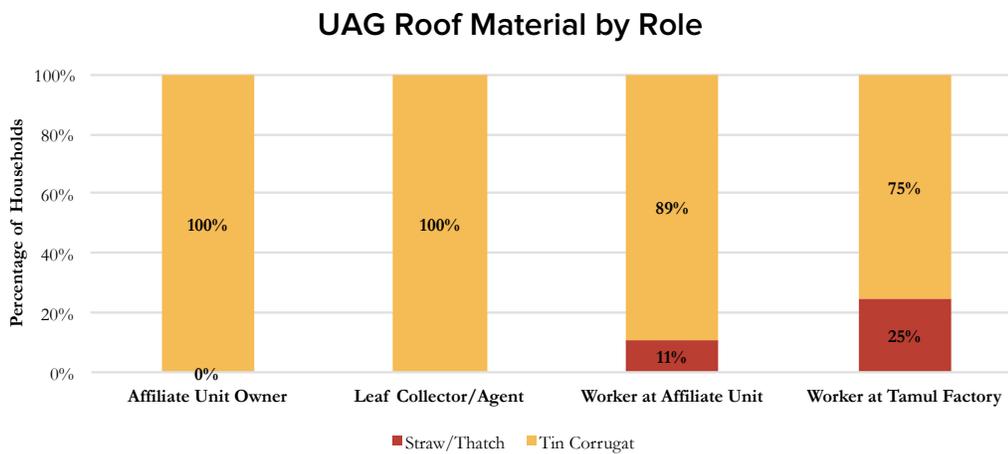


Fig. 3.14 Distribution of roof material used by Upper Assam beneficiaries

Nearly all households from the four beneficiary categories, with the small exception of 11 percent of workers at affiliate units and 25 percent of Tamul factory workers, choose corrugated tin, presumably to provide protection against the harsh weather of Assam. With incessant rains and frequent flooding, tin serves as effective protection, especially when compared to the alternative of thatch/straw.

UAG Wall Material by Role

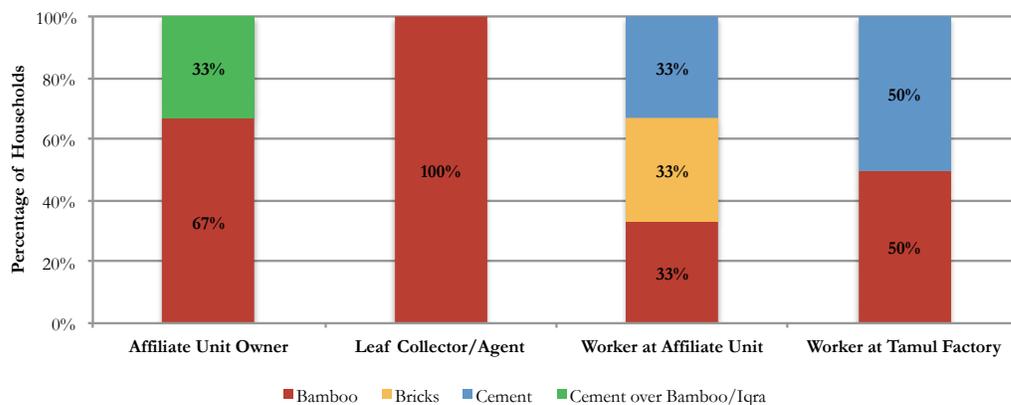


Fig. 3.15 Distribution of wall materials used by beneficiaries

Construction of these houses relies heavily on locally available raw materials such as bamboo, wood, and *iqra*. These materials, though usually viewed as inferior, provide incredible durability in the face of rains, flooding, and even earthquakes. This explains why a vast majority of households across beneficiary categories currently use bamboo as wall material. In 50 percent of the leaf collectors’ houses and 75 percent of Tamul factory workers’ houses, pillars are constructed of concrete, emphasizing the need for a solid frame. This need for a rugged structure will likely lead to a large percentage of households switching to building with cement and concrete as incomes rise.

UAG Pillar Material by Role

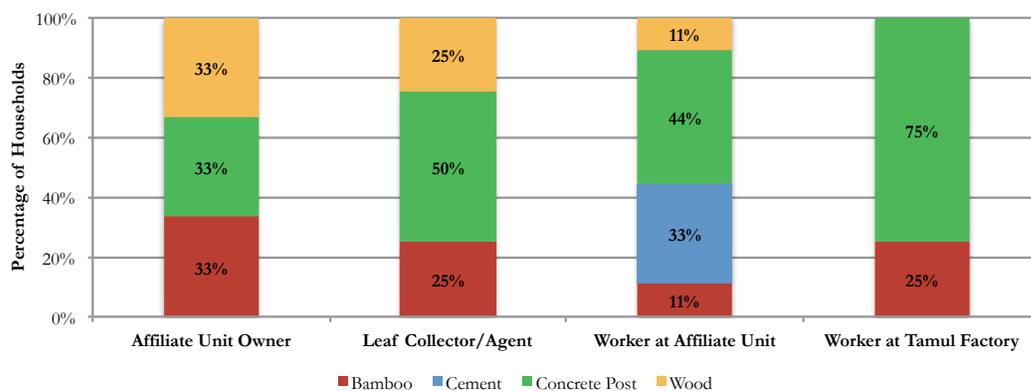


Fig. 3.16 Pillar materials used by beneficiaries

NUTRITION SECURITY

The unique geography where Tamul Plates operates ensures that beneficiaries have access to balanced, nutritious diets. Households grow various grains in their fields for domestic consumption. Close proximity to freshwater sources provides abundance of fish and other non-vegetarian food. In fact, 85 percent of the households interviewed mentioned that they eat non-vegetarian food at least once every week. Of the households surveyed, more than 95 percent reported eating at least one type of pulse regularly. Consumption patterns in terms of both quality and frequency are extremely high, especially when compared to other states in India. These respondents’ diets are well balanced with the presence of carbohydrates (from food grains), protein (from meat/fish and pulses), and vitamin and minerals (from vegetables and fruits).

However, the region is severely challenged in access and affordability of dairy products like milk, *paneer* (cottage cheese), *ghee* (clarified butter), and *khoya* (condensed milk). Only 67 percent of the households interviewed reported consuming dairy either never or only one or two times in a month.

SCHOOL GOING PATTERNS FOR CHILDREN

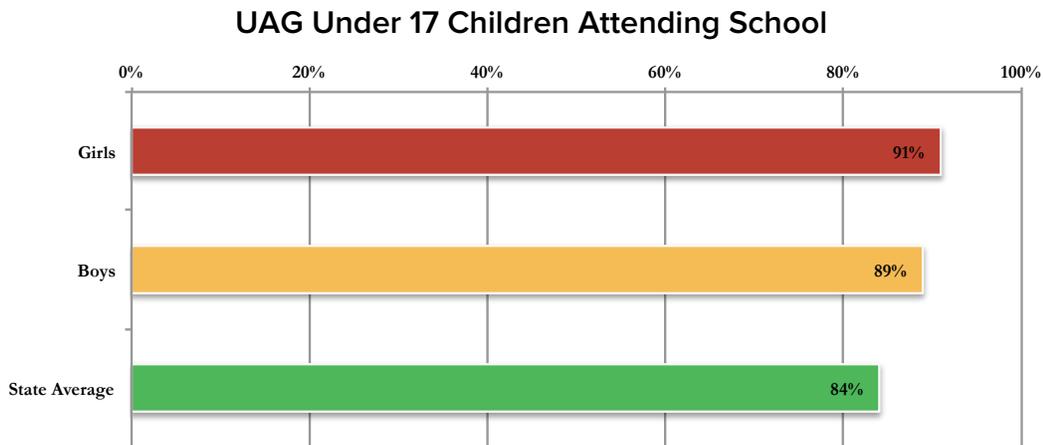


Fig. 3.17 School enrolment rates for children under 17 years old

The surveyed households include 20 school-aged children of 5-17 years old, 18 of whom were attending school (gross enrolment rate of 90 percent).²⁴ For boys the enrolment rate is 89 percent, whereas for girls the enrolment is 91 percent. These numbers are all above the state average, again emphasizing the importance of education for the beneficiary group.²⁵

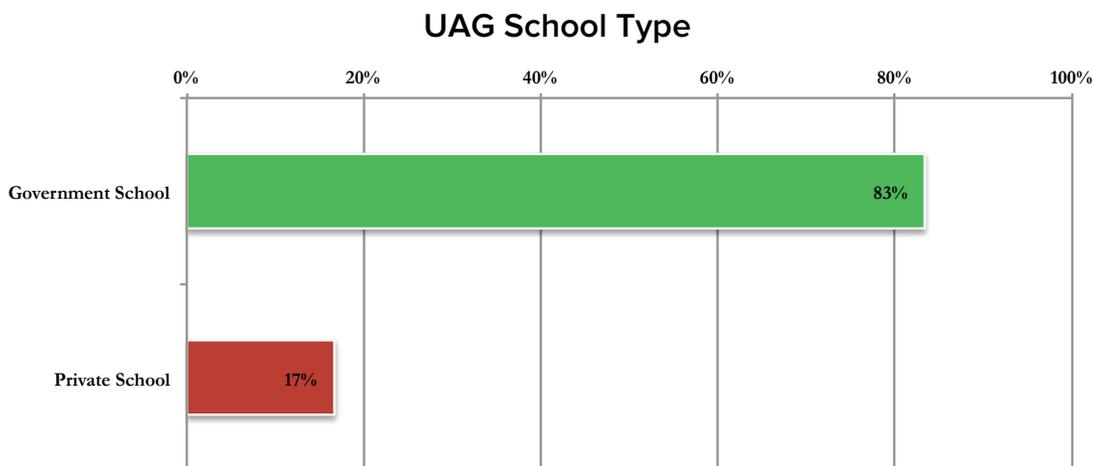


Fig. 3.18 Type of School attended by children less than 17 years old

Surprisingly, government schools still form the overwhelming majority, with 83 percent of children reported attending them. A significantly smaller percentage (17 percent) of children of beneficiaries in this group attend private schools.

²⁴ Gross enrolment rate is the percentage of children of official school age who are enrolled in school compared to the total population of children of school-going age.

²⁵ Gross enrollment rate (GER) in Assam for children between 5 and 10 years old is 106 percent, whereas for children 11-14 years old the GER is 83 percent. The gross enrollment ratio can be greater than 100 percent as a result of grade repetition and entry at ages younger or older than the typical age at that grade level.

CONCLUSION

- Leaf plate producers and raw material collectors, with PPI scores of 36 percent and 28 percent respectively, are the most likely among Upper Assam Group beneficiaries to fall below the poverty line.
- Tamul Plates-related activities are the primary source of income for 55 percent of leaf plate producers, highlighting a heavy reliance on Tamul Plates. However, 100 percent of affiliate unit owners and 80 percent of raw material collectors treat income from Tamul Plates as a complement to other sources of income.
- 91 percent of boys and 89 percent of girls of school-going age are currently enrolled in school, higher than the state average of 84 percent. Of these, only 17 percent attend private school.
- Food constitutes the highest percentage of household expenditure, at 48 percent. By contrast, only 6 percent of household expense outlay goes towards savings each month.
- With 95 percent of houses electrified and 70 percent having access to safe drinking water, the access to utilities among the Upper Assam Group is higher than the state average.
- Permanent (*pucca*) housing is reasonably high among Upper Assam Group beneficiaries, with 33 percent of affiliate unit owners, 67 percent of affiliate unit workers, and 50 percent of Tamul factory workers living in such houses. However, none of the leaf collectors surveyed live in permanent houses, instead using inferior building materials such as bamboo and tin.

EMPLOYEE PROFILES



DWIJEN DAS (AGE 48)

PATLA VILLAGE, ASSAM - AFFILIATE UNIT OWNER



Q: HOW DID YOU GET STARTED MAKING TAMUL LEAF PLATES?

Dwijen: “Three years ago, I set up an [affiliate production unit] with two machines at my home here in Patla. Last year I added a third machine. Now the whole family is helping to make plates in addition to our work on the farm.”

Q: HOW HAS WORKING WITH TAMUL PLATES HELPED YOU MOST?

Dwijen: “My wife Kanchan helps by cleaning and drying the leaves. A few years ago she developed kidney stones that required surgery. We were able to use the money earned from the leaf production to pay the medical bills without any long term shocks to the family, and she has since returned to full health.”

Q: HOW ELSE HAVE YOU SPENT THE EXTRA MONEY EARNED MAKING PLATES?

Dwijen: “I have built a sturdier house with a concrete foundation and pillars. I have also expanded it from two to four rooms so the family has more space.”

Q: WHAT COMES NEXT?

Dwijen: “My son (Dwijen’s son)Jituparna has dreams of expanding the unit and employing day laborers from the village.”

Q: WHAT DOES THIS WORK MEAN TO YOU?

Dwijen: “I’m happy to fulfill the needs of my children. I don’t think about myself. My son has taken on a lot of responsibilities. For example, he planted a crop of potatoes this year that’s expected to bring in a good profit. I also have a savings account for each of my children and put 300 rupees away into each of them every month.”

SUBANTI DAS, RELATIVE OF PRANJIT DAS, (AGE 50)

CHAMUAGATI VILLAGE, ASSAM - LEAF PLATE PRODUCERS



Q: HOW DID YOU GET STARTED WORKING WITH TAMUL PLATES?

Subanti: “My relative owns a leaf production unit and has hired six employees to help out. My job is to wash leaves before they are pressed into plates and sometimes help with packaging and running machines.”

Q: DO YOU LIKE THIS JOB?

Subanti: “I am making a lot more with Tamul than I could with a government-scheduled job. This job is close to my home.”

Q: WHAT DO YOU LIKE ABOUT YOUR JOB?

Subanti: “The best part of this job is, it’s not in the hot sun. It’s in the shade and easy to do. It fits in easily with my housework. I can earn money at home and not be on the farm. If I need an advance on my salary, I can easily get a little. I make a lot more with Tamul than I could with a government-scheduled job.”

Q: WHAT DO YOU SPEND YOUR INCOME ON?

Subanti: “, I do not give my salary to my husband but rather decide how to spend it, on my own. I often pay for household goods and my children’s school expenses.”

Q: ARE YOU SAVING UP FOR ANYTHING RIGHT NOW?

Subanti: “I have saved up Rs. 1000 for the Holi festival to buy food for my relatives to celebrate.”

ARUP PATHAK, (AGE 31)

BARPETA, ASSAM -TECHNICAL MANAGER FOR TAMUL PLATES



Q: HOW DID YOU GET STARTED WORKING WITH TAMUL PLATES?

Arup: "I started as a field coordinator, visiting nearby villages to recruit employees and oversee the factory. Now I do research and development for new products, such as our leaf dryers. I spent two years refining the current dryer. We had to throw away four of them until we got it right. I really believe in trial and error until you get there."

Q: CAN YOU TELL US ABOUT THE LEAF DRYER?

Arup: "The leaf dryer I created enables the company to continue producing plates during the monsoon season, when Arecanut leaves are saturated in water and go moldy if stacked wet. The drier enables Tamul Plates to expand production and employment year-round."

Q: DO YOU ENJOY WORKING WITH YOUR BROTHER?

Arup: "I am very excited about this. My elder brother is the production manager. I am his boss, but it's a reasonably flat organization. I joined the company first, and we work in separate areas, so there's no real competition."

Q: WHAT ARE YOUR GOALS FOR THE FUTURE?

Arup: "My goal has always been to do something that will set me apart. I feel that my work at Tamul does that. I want our business to grow — for example, we could use bamboo fibers to make products, we are already testing this. I walk around with designs in my head for new machines."

Q: WHAT ARE YOUR STRENGTHS AND WEAKNESSES WHEN IT COMES TO YOUR JOB?

Arup: "I guess my biggest talents would be that I have focus and perseverance. I don't give up. My biggest flaw is that I cannot speak English. I have studied it so much, and everyone at Tamul teases me and tries to get me to speak it, but I just have a block or something."

"The one thing people should know about me is that I am dependable."

AJIT DAS AND CHANDRA SHIL (AGES 48)

BARANGABARI VILLAGE, ASSAM - LEAF COLLECTORS



Q: HOW DO YOU KNOW EACH OTHER?

Ajit: “We are both 48 years old. We grew up in the same village, went to the same school, married two sisters, and have been best friends all our lives. Now we work together, too, in arecanut leaf collection.”

Q: HOW DO YOU SPEND YOUR SALARY FROM TAMUL PLATES?

Ajit: “The income we earn goes to necessary household needs like food, education, and health costs.”

Q: WHAT DOES THE FUTURE OF YOUR WORK WITH TAMUL PLATES LOOK LIKE?

Chandra: “We are agents, going from house to house buying leaves that the residents have collected. We’re trying to collect more leaves and get more youth involved.”

Ajit: “The young people are just sitting around, so they might as well do something to make income. We have hired six teenagers so far.”

Q: HOW MANY HOUSEHOLDS DO YOU COLLECT FROM?

Ajit: “I collect from 39 households, and Chandra collects from 35 households.”

Q: WHAT ARE YOUR DREAMS FOR THE FUTURE?

Ajit: “We want more income and more employees. We want to marry off our children — but if our sons or daughters want to go to university, we will support them. We look forward to being old together.”

PADUMI PATHAK (AGE 43)

BARPETA, ASSAM - LEAF DRYER OPERATOR



Q: WHAT IS YOUR JOB HERE?

Padumi: "I operate the leaf dryer with three other women."

Q: WHAT DO YOU ENJOY ABOUT WORKING AT THE TAMUL PLATES FACTORY?

Padumi: "I like my job because of the income. I can spend it on the household — dal, rice, and some fish, and on the children, for their clothes and education."

Q: DO OTHER WOMEN IN YOUR NEIGHBORHOOD WORK?

Padumi: "No, nobody else in my village steps out of the house. They do weaving or livestock care at home. Before I found this job I was bored."

Q: HOW DO YOU FEEL ABOUT WORKING OUTSIDE THE HOME?

Padumi: "When I want to compare myself to other women, I feel proud that I am going out of the house and doing this work."

TANJIT PATHAK (AGE 22)

BARPETA ASSAM - LEAF PLATE PRODUCER



Q: HOW LONG HAVE YOU WORKED WITH TAMUL AND WHAT IS YOUR JOB?

Tanjit: “I have worked here for four years, since I was 18, and I run the machines.”

Q: TELL US ABOUT YOUR TYPICAL DAY HERE

Tanjit: “I come to work at 6am to begin heating the machines. They are ready to start by 6:45, and we work until 2pm with a break for lunch. At 2pm, I count my plates and clean up for the day.”

Q: WHERE DO YOU LIVE? DO YOU HAVE A WIFE?

Tanjit: “I live close to here with my parents and sisters. My dad cooks in a hotel, and I work here to support the family.”

Q: WHAT DO YOU SPEND YOUR MONEY ON?

Tanjit: “I give about 60 percent to my family and the rest I spend on clothes, festivals, and my mobile phone.”

Q: WHAT DO YOU WANT FOR YOUR FUTURE?

Tanjit: “I have two friends in college but I don't want to go to there. This job provides enough to support my family, so I'm happy just to continue here.”

Q: WHAT IS YOUR FAVORITE PART ABOUT YOUR JOB?

Tanjit: “I just returned from a trip to Bhutan, which was the first time I have left Assam. I went with Santanu, the Factory Manager, to install their first affiliate production unit and to stay for one week to train the new owners.”

Q: WOW, WHAT WAS THAT EXPERIENCE LIKE?

Tanjit: “I really liked it. I want to travel more and do more trainings like that.”



Written by: Jyotsna Taparia and Vickram Saigal, Upaya Social Ventures
Copyediting: Katherine Gustafson
Layout: Alexandra Albu and Steve Schwartz
Photographer: Laurel Curran. All Photos are property of Upaya Social Ventures.

Special thanks to Arindam Dasgupta, Debaleena Ray, Sachi Shenoy, Aparna Arora, and Sreejith Nedumpully

ABOUT TAMUL PLATES

Tamul Plates produces and markets high-quality, all-natural disposable plates and bowls made from arecanut (palm) tree leaves under the Tambul Leaf Plates brand. The company produces dinnerware through a network of affiliates across the tribal regions of Northeast India, ensuring that each affiliate has the skills and machinery needed to produce superior-quality arecanut products. The company is working to generate maximum value for both the rural producer and urban customer through production and marketing of high quality products in an ecologically sustainable manner. For more information on Tamul Plates, please visit www.tpmc.co.in.

ABOUT UPAYA

Upaya Social Ventures (also referred to as “Upaya”) is building businesses that create jobs and improve the quality of life for the “ultra poor.” We do this by providing seed funding and business development support to promising entrepreneurs that can create hundreds of jobs in India’s most impoverished communities. As these small businesses grow, they will generate sustainable, well-paying jobs for families living in extreme poverty. As of March 2015, this work has resulted in six financially healthy, scalable businesses that have created near 1,200 jobs in local communities. For more information, please visit www.upayasv.org.