

# SWITCHING TO SUSTAINABLE AUTORICKSHAWS SYSTEM



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# INSTITUTIONS

Fondizone ACRA  
ENVIU Foundation  
The Energy & Resources Institute (TERI)  
Women Health and Development (WHAD) Foundation  
Road Transport Office (Bengaluru)  
Road Transport Office (Chennai)  
Karnataka Pollution Control Board  
Traffic Police Bengaluru

## LIST OF ABBREVIATIONS AND KEYWORDS

**SHG:** Self Help Group (SHG) is a holistic programme of micro-enterprises covering all aspects of self-employment, organization of the rural poor into self Help groups and their capacity building, planning of activity clusters, infrastructure build up, technology, credit and marketing.

It lays emphasis on activity clusters based on the resources and the occupational skills of the people and availability of markets.

Self-Help Group refers to self-governed, peer controlled, informal group of people with same socio-economic background and having a desire to collectively perform common purposes. Here poor people voluntarily come together to save whatever amount they can save conveniently out of their earnings, to mutually agree to contribute to a common fund and to lend to the members for meeting their productive and emergent needs.

**PUC :** Pollution Under Control is the mandatory certificate obtained by vehicle owners and maintained in compliance with the emission norms.

**RTO :** Road Transport Office

**SC :** Scheduled caste

**ST :** Scheduled tribe

**OBC :** Other backward classes

**DL :** Driving licence

**PDS :** Public Distribution System

**PCU :** Passenger Capacity Unit

**CNG:** Compressed Natural Gas

**LPG:** Liquefied Petroleum Gas

**IMEI:** International Mobile Equipment Identity

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Report Author:



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For further information on the European Union, its activities in Cambodia and the SWITCH-ASIA program, please visit:

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For further information on the implementing partners, please visit:

[www.acra.it](http://www.acra.it)  
[www.enviu.org](http://www.enviu.org)  
[www.whadindia.org](http://www.whadindia.org)  
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## EXECUTIVE SUMMARY

The report titled, “Switching to a sustainable auto-rickshaw system: Triggering sustainable lifestyles and poverty reduction in urban India” for the baseline activity is produced within the framework of the project “Switching to Sustainable Autorickshaws System” funded by the European Union under the SWITCH-Asia Programme. Premised on the goal of sustainable consumption, the objective of this project is to provide integrated solutions based on three principles, namely access to financial and social services, alternate sources of revenue and clean tech for auto- rickshaw engines thus propelling consumers to opt for cleaner choices. The implementation partners of the project include, Fondazione ACRA, ENVIU Foundation, The Energy & Resources Institute and Women Health and Development (WHAD).

Through behavioural change and marketing campaigns, the project aims to bring an unorganized sector into the fold of sustainable production and consumption while promoting sustainable lifestyles. It identifies the fact that auto-rickshaws have emerged as a continued choice for transportation in metropolitan cities as well as been a significant livelihood opportunity for a large segment lower income groups scouting for employment within the city spaces.

With the specific objectives of introducing financial inclusion of drivers, generating social security and driver ownership of auto-rickshaws the project aims to achieve the overall target of sustainability and viability of the profession. The current scope of the research is to establish baseline information on the socio-demographic profiles of the auto drivers, understand their knowledge of, access to and utilization of social benefits, personal liabilities and professional challenges that pose as impediments to sustenance. This categorically locates the current techniques of operation, the model of autos used and operative negotiations with the traffic authorities, extraneous challenges and experiential and perceived challenges. However, the outcome at the next level is to arrive at an iterative logical framework for the monitoring and evaluation to map the project's achievement of target.

The research is conducted through a mixed-method approach in Bangalore and a purely qualitative technique in Chennai. With a total of 230 respondents, the outcome of the baseline survey attempted to generate a situation understanding of the auto-drivers and the professional viability through various parameters. Health was a key component of the study since an improvement in lifestyle not only constitutes of economic sustainability but also the auto drivers health. However, apart from accessing subsidized public health-care facilities on need basis there was no mention of organized and sustainable access such as regular checkups and consultations.

It emerged that most auto-drivers were migrating from nearby rural regions and have been introduced into this profession through certain networks. While a small proportion had other professional engagements, most of them were only driving autos. It also became apparent that while most of them only used automobile insurance, most of them accessed and utilized other social benefits, rarely. However, obtaining an auto insurance has been made mandatory in Chennai, a move that has been taken well by the auto driver community since these are not all-encompassing.

During the interview, numerous suggestions emerged on how the state could make processes conducive for them. Aides on-transits such as on-spot accident relief, subsidized meals, mobile toilets could be more meaningful for them. Not only do the auto-drivers but also 96% of their dependents overall did not have any health insurance coverage.

However, the biggest challenge for auto drivers seemed to be their daily negotiations to make a better earning at the end of the day given the tough competition posed by mobile application based cab and auto hiring services. The biggest challenge being the smart pricing mechanism of such services vis-a-vis their own surge pricing during peak traffic hours in order to economize a route makes the customers chose the former.

Some of the recommendations that emerged out of the study include, adoption of incentivization mechanisms to auto drivers to aide the process of getting rid of their old autos as well as to switch to cleaner fuels. A rebate of a certain amount on the price of gas should be made from the government.

Moreover, progressive training needs to be given to auto drivers that can help improve their language, skill set and attitude towards passengers as prescribed and proposed in the Road Safety Act, 2015. It will also help with issues like rash driving and rude behaviour towards passengers. A replication of the Self Help Group model for creating savings among auto drivers could be done by creating a group of 20 people and electing 3 people as heads to encourage collective saving.





# FINDINGS

## CHAPTER 1

### INTRODUCTION

The two major milestones that marked the onset of a new trend in the development discourse is the Oslo symposium in 1994, preceded by extensive work carried out by the European Commission in 1993 leading to the promulgation of what is essentially known as sustainable development. While the latter put in concerted efforts to integrate the environmental considerations into policy making within all sectors of the economy the former proposed a working definition for sustainable consumption and production. As propounded by the symposium, *“the use of goods and services that respond to basic needs and bring a better quality of life, while minimizing the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardize the needs of future generations”* (Source: [Oslo Roundtable on Sustainable Production and Consumption](#)) indicates sustainable consumption.

The Agenda 21 promotes *“resource and energy efficiency, sustainable infrastructure, and provision of access to basic services, green and decent jobs and a better quality of life for all while recognizing imbalances in the pattern of global and national consumption patterns, it.* (Source: [United Nations](#)). Therefore sustainable solutions can potentially propel economic growth by expanding livelihood opportunities and introducing strategic techniques of inclusivity. The ramifications of such measures on a dynamic economy such as that of India may be an interesting case to present given that its ecological footprint has doubled since 1961 (Source: [India Together: The real challenge to sustainable development](#))

As urban centers in India have been continuously experiencing an untoward pattern of growth, the risk remains in the increasing volume of consumption outweighing improvements in energy and resource efficiencies. Thus, the project titled, *“Switching to a sustainable auto-rickshaw system: Triggering sustainable lifestyles and poverty reduction in urban India”*, identifies mobility as a crucial hotspot for promoting sustainable lifestyles, with specific focus on the auto rickshaw sector, owing to the fact that these are neither aligned to the sustainability objectives nor has it emerged as an organized sector. Moreover, while it forms a backbone of the urban transportation infrastructure the sector has a significant share in the urban workforce.

This study specifically focuses on the economy of auto drivers in two metropolitan cities of India, namely Bengaluru and Chennai intending to propose strategic insights on increasing their occupational viability, addressing their socio-economic vulnerabilities and catering to the broader debates of urban governance. The ultimate outcome of the suggested intervention would be to generate an efficient, reliable and sustainable model for urban transport with reduced environmental hazards and eventually the health hazards that it pose.

## 1.1 Background

Auto rickshaws provide a viable choice for commuters in metropolitan spaces while being an important livelihood opportunity for many. However, unsustainable models of auto rickshaws, pose long term challenges to the viability of the profession. In order to make itself a viable and lucrative livelihood, the auto rickshaw industry needs to address its challenges of its current scope of organization, high levels of informalization and more importantly, outdated engineering causing environmental degradation.

The intervention under study here aims to influence consumers' choices concerning mobility while tackling main challenges affecting auto-rickshaw drivers who are among the most marginalized groups and technically belong to the lower income groups of Indian society and thus covering all three aspects of economy, society and environment. The study is a combination of a baseline activity and development of a monitoring framework on the basis of a two-city study in Chennai and Bengaluru. The baseline would primarily assess the current situation of the auto drivers and the challenges faced in the profession that would culminate into a set of benchmark indicators to define a project specific monitoring system.

## 1.2 About the intervention

The project intervention, known as Namma Auto is targeted in two cities of Bengaluru and Chennai. The project is a joint initiative by Fondazione ACRA, ENVIU, The Energy and Resources Institute TERI and Women Health and Development (WHAD) funded by European Union as part of their SWITCH ASIA programme that broadly works on the theme of sustainable consumption and production patterns.

The major goal of Namma Auto initiative is to promote sustainable lifestyles and help in poverty reduction while reducing Carbon Dioxide emissions and air pollution in India. Auto drivers are targeted to be the first tier of beneficiaries as part of this program while the urban passengers, concerned authorities and service provider companies form the second tier of beneficiaries. The project provides an integrated solution based on three principles: access to financial and social services, alternate sources of revenue and clean tech for auto-rickshaw engines. It aims to achieve the above mentioned through various ways such as financial inclusion for auto drivers, social security, driver-ownership of auto-rickshaws, higher incomes and positive environmental impact. The action will be equally devoted to facilitating consumers to make a more responsible choice thereby contributing to a greener economy.

## CHAPTER 2

### METHODOLOGY

The baseline activity has been conducted in the project intervention area to obtain information on the auto-driving sector. The cities include Bengaluru and Chennai, with the former has been a pilot site for the intervention. The study was conducted through a mixed-method approach in Bengaluru and qualitative techniques in Chennai. The finding from the study will subsequently inform the programme's logical framework and the monitoring framework.

#### 2.1 Specific objectives of the study

The specific objectives of the study has been outlined below:

- To obtain information on their demographic profile which includes basic information of the auto drivers and their ecosystem. This includes information on their on their age, household structure and assets, family size, residence, education, health, occupation and migration pattern, if any
- To derive an understanding of the economic profile of the auto drivers which includes their pattern of livelihood, incomes, consumption patterns, expenditures, savings, investments, access to and knowledge of insurances, loans, government schemes along with sources of borrowing in contingencies.
- Information pertaining to the auto-rickshaw which includes the type of engine, model, year of purchase, fuel type and efficiency, average distance travelled during weekends and weekdays, PUC reading, size/occupancy (variation by weekday/weekends), hours of operations, occupational hazards (frequency of such hazards), legal and regulatory aspects, response to new technology such as apps, wallets, condition of roads traversed and impact of other factors. This includes aspects such as no. of rides per day, average distance travelled per day, average earnings per day, average waiting time between trips.
- Assess knowledge/perception/feedback on environmental factors such as pollution levels and energy solutions such as clean engine-four stroke or two stroke engine.
- Identify customer profiles and negotiations from the standpoint of the drivers, their responses/reasoning to incidents such as denial of rides, price negotiations.
- Explore opportunities available and support received by auto-drivers in their corresponding area of operation.
- Assess the nature of relation and dynamics in the association and with the local administration which includes, police, traffic control department, transport department.
- To understand competition, viability, stressors and opportunities in the profession.

## Methods of enquiry

The key methods of enquiry include surveys through structured questionnaire, focused group discussions with auto driver networks and auto unions and in-depth interviews with officials

**Surveys:** The surveys were conducted with auto drivers seeking information on their socio-economic and demographic attributes, their pattern of engagement with the profession, perceived viability and openness to intervention goals.

**Focused Group Discussion:** The focused group discussions were conducted with auto unions and driver networks to obtain a macro and microscopic view of the auto driving sector through the lens of labour. The indirect themes for the study was to assess the scope and pattern of entry, sustenance and exit from the profession. The focused groups began by looking at the realities of the auto drivers and their professional economic and social negotiations. Eventually, the discussion focused on the systems of institutional and non-institutional power structures which generate conditions of individual and collective bargaining through their knowledge, engagement and transaction with the regulatory and legal structures in the industry. Finally a reflection on the sense of competition, situational enablers and disablers were categorically discussed to arrive at potential solutions and strengthen the intervention strategies.

## Key Informant interviews

To get a fair idea of the auto rickshaw industry, it was pertinent that information is obtained from all stakeholders of the industry. Hence, one-on-one key informant interviews were conducted with representatives from the traffic, PUC and transport departments respectively in both cities. Semi-structured interview formats were used to obtain information on sustainability of auto rickshaws, licenses and permits, registration, traffic management and pollution control.

## 2.2 Sampling

The quantitative method of surveys was conducted with a sample of 239 drivers in Bengaluru. These auto drivers were selected from within the identified networks and a few of them were located from important junctions in the city such as auto stands, malls, cinema theatres, metro stations, railway stations. The sample was distributed randomly across categories of renter drivers and owner drivers. Two focus group discussions were conducted with union and non-union members of auto drivers separately in Bengaluru. The first group had 11-15 auto drivers who belonged to the Karnataka Auto and Taxi Drivers Union. The second group had 10 members all of whom were members of an informal network of auto drivers associated with Three Wheels United.

In Chennai, Four focus group discussions were held at the busiest points of the city and each group had an average of ten members. These auto drivers were gathered in and around their work areas i.e. either at auto stands or at junctions where they were waiting for passengers. Two focus group discussions were held at the prepaid auto stand and back gate auto stand

of the Chennai central station. The two other FGDs were conducted outside the Egmore railway station and at an auto stand near the Rippon building, respectively.

Key informant interviews were conducted with the stakeholders on the basis of the appointments taken from their respective offices. Four KIs were conducted in the city of Bengaluru with the following people:

- Mr Manjunath Chowdary Former Traffic Police, Shivajinagar
- Mr. R.I. Kasim, ACP Traffic and Planning
- Mr. Ramiah Gowda, Regional Transport Officer, Auto rickshaw
- Mr. Mahesh, State Pollution Control Board

Four KIs were conducted in the city of Chennai with the following stakeholders

- PUC owner at Egmore Emission Checking Centre
- PUC worker at Spurtank Road Emission Testing Centre
- A higher level official from Traffic Planning Department
- Traffic Police Constable, Egmore Pantheon roundabout junction

### 2.3 Limitations to the data collection

- For conducting key informant interviews, appointments were required from high level officials in the pollution, traffic and transport departments which was a challenge. As a result, in Bengaluru two interviews were not conducted with officials from the pollution and transport departments respectively. In Chennai as well, interviews were conducted with the lower rung of officials such as the PUC owner and traffic police constable instead of a representative from a higher authority.
- Given the mobility in the occupation of an auto driver, it was difficult to source them and gather them for the research study. There were also components of the survey where the auto drivers did not wish to disclose information on. Because of such constraints, the analysis drawn from the surveys do not hold true for the entire sample size. In such cases, the response rates have been specifically mentioned within the report.
- Given that the sample for the focused groups were obtained through a snowballing technique from within certain pre-identified network in Bengaluru, reaching out to respondents to participate in the qualitative exercise was a challenge in Chennai. Resultantly, focus group discussions were held at auto stands and traffic signals where there the participants were on transit. This became an obstacle to understand the socio-demographic variability of the group owing to the dearth of time and attention span of respondents.

## CHAPTER 3

### GENERAL PROFILE OF AUTO DRIVERS

Information was gathered on the general profile of auto drivers to understand the existing demographic patterns within the group and their socio-economic attributes. The current chapter will focus on certain specific trends obtained through the surveys and a few case examples explained through anecdotes and experiences.

#### 3.1 Demographic characteristics

In the total sample of 239 drivers in Bengaluru, only one auto driver was female while the remaining were all males. In Chennai, two women were recruited from the Chennai central prepaid auto stand for the focused groups, who stated that they were aware of 30 such women working with them at the same spot. Although there were no exclusive facilities for the female auto drivers from the government, they still preferred auto driving over other professions as they have their freedom and “are not accountable to anyone”.

A major proportion of the sample in were Hindus (63%) followed by Muslims (32%) and Christians (5%). OBCs formed the largest category of auto drivers in the sample (74.68%) followed by other caste groups as given in the table below:

Caste Category	Percentages
Other Backward Caste	74.68%
Scheduled Caste	16.46%
General	4.43%
Unidentified	2.53%
Scheduled Tribe	1.90%
Grand Total	100.00%

The age range of the auto drivers was between 22 years to 65 years with the average age being 39 years. About 94% of the auto drivers were married while the remaining 6% were unmarried. The following table/graph shows the highest education level attained by the sample of auto drivers that clearly shows that almost half of the sample had completed secondary level of education.

Education Level	Percentages
Completed Secondary	48.06%
Completed Primary	21.36%
Completed Upper Primary	20.87%
Pre University Course	5.34%
Uneducated	2.43%
Completed Graduation	1.46%
Completed Higher Secondary	0.49%
Grand Total	100.00%

### 3.2. Living Conditions

A baseline understanding of the living conditions of the auto drivers in the city becomes an essential component since the intervention intends to generate a positive impact on the same. This would serve as an essential point of reference for comparison while addressing some of the aspects of marginality. It was critical to locate the difference in a perceived change vis-a-vis an actual change which has been discussed in due course.

### 3.3. Household structure

Information on the household structure was collected wherein it was reported that 98% of the respondents had permanent houses at their current residence place of residence, ie. in the city with outer-walls made of cement and bricks and, roofs made of iron-sheet. Out of the 105 responses, 81% had a single-room house and 16% had a two-bedroom house. 68% of the respondents reported to have a toilet at their current place of residence. Information with respect to household assets was obtained only for the current place of residence. Out of the 112 responses received, 98% owned an electricity connection. All the 118 respondents owned a fan. Out of 115 responses, 98% had ownership of an LPG connection and out of 78 responses, 53% possessed a smart phone.



### 3.4. Household Composition

The household composition looks at the auto driver's family structure at his residence in Bengaluru and at his hometown/village. The study looks the modalities through which the family may serve as a financial providers or act a liability of the respondent. The viability and therefore the continuation with the profession is correlated with his ability to find sustenance. Therefore, as 95% of the auto drivers served as the head of their respective households implies that assume a pivotal role in the family income. However, on an average, the family size at the current place of residence of the auto drivers was four with an average of two children per family. The majority of financial dependents were largely at the current place of residence and in most cases the complete dependents are daughters (93%), sons (89%), wives (86%), fathers (70%), and mothers (80%).

Therefore it is fair to infer that a typical auto driver would have two transitory categories of dependents which is the son and the daughter and three temporal categories of dependents which is the wife and parents.

### 3.5. Economic Profile

The economic profile of the household includes the income, expenditure, economic benefits availed, savings and the consumption patterns.

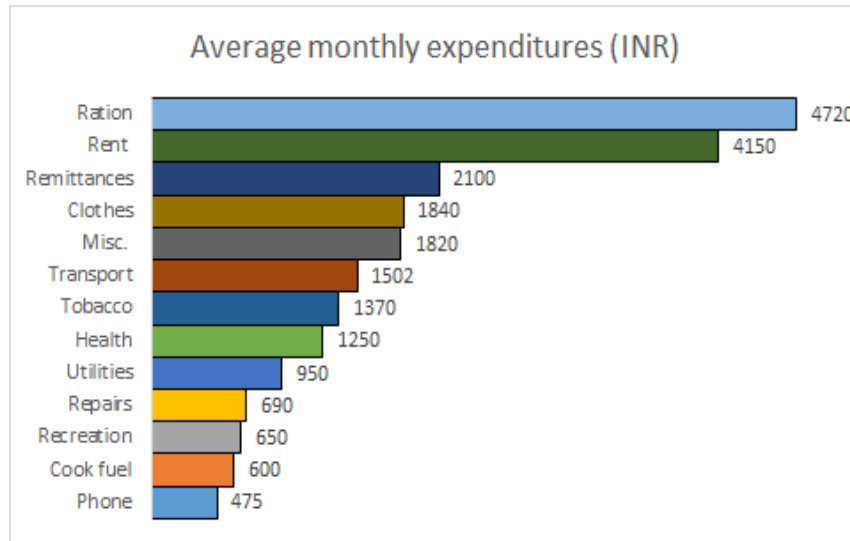
#### 3.5.1. Income, Saving and Occupational Engagement

The median household income of an auto driver was reported as 15,000 INR (205 Euro) per month at the current place of residence. The survey tried to capture if auto drivers had multiple jobs in a given year in order to understand their economic dependence on the profession of auto driving. These jobs were categorized as primary occupation in terms of engagement and in terms of earning. The first category considered top two jobs in which the respondent had prolonged/continuous engagement, as the primary occupation. The second category considered top two jobs from where the respondent received maximum income in a year, as the primary occupation. In terms of continuous engagement, out of the 132 responses it was found that auto driving was the primary occupation for 76% respondents and another 3-4% were involved in related work like auto electrician, mechanic and servicing. Only 12 of the 132 respondents were engaged in a second job. It was however found that primary occupation category is fairly homogenous wherein there is an overlap of the two variables of continuous engagement and receipt of income. The FGDs in Bangalore brought forth a few examples of ones who shifted to auto driving from other jobs such as that of a coolie, lifting bags in corporate offices, welding, etc. From the union group of auto drivers, one auto driver cited bad weather conditions, stress and accidental risks as reasons for making auto rickshaw driving his secondary occupation while owning a grocery shop as the primary occupation. Therefore, even during the qualitative exercise it emerged that auto driving was the primary occupation for most participants.

On an average, the auto drivers had a monthly savings amount of 4500 INR (61.4 Euro)

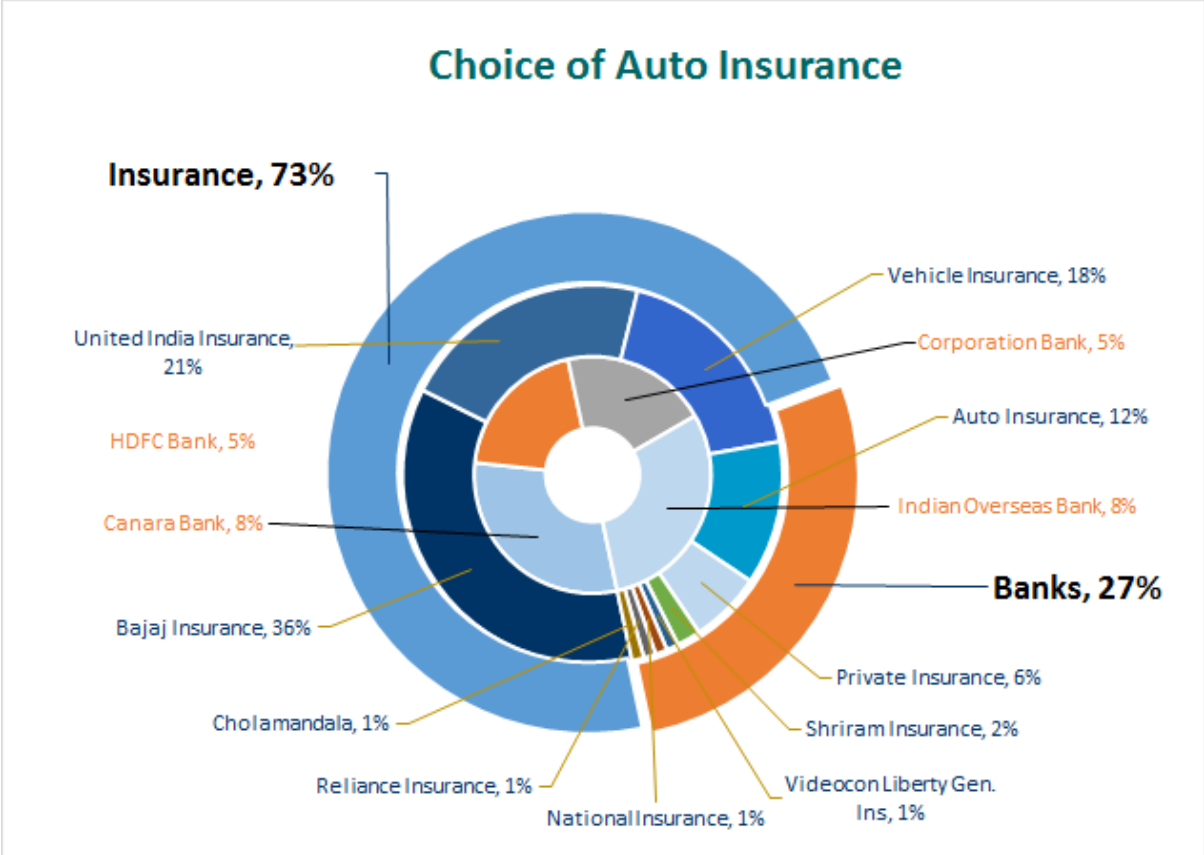
### 3.5.2. Expenditure

The monthly average expenditures on various overheads is elucidated in the graph below. The maximum amount of expenditure is on ration closely followed by house rent (denoted by rent on the table):



In Bangalore, the mean value of an auto insurance of INR 84508 (1161.7 Euro) and the median value is Rs. 103500. The standard deviation for the same sample of respondents is INR 45563.39 (626.38 Euro) which shows the extensive range in the values of insurances held by various auto drivers. The mean value for the annual auto premium amount was INR 6575 (90.39 Euro) with a median of 5500 and standard deviation of INR 7641.91 (105.06 Euro). From the sample, it was seen that the major sources of obtaining the auto insurance were insurance companies and banks. However, having an auto insurance was a necessary prerequisite in order to obtain the badge that certifies a person to drive the auto rickshaw in Chennai. It was found that auto drivers were against this mandatory policy of auto insurance because of two main reasons. One, not all kinds of damages are covered by the insurance companies and two, old auto models are not provided with insurance claims.

As identified from the Bengaluru data, loans were majorly taken for the purpose of purchasing autos. On an average, loan taken for purchasing autos was INR 146650 (2016.08 Euro) and the major source for obtaining these loans was from finance companies. A source-wise distinction has been graphically depicted below:



### 3.6. Migration patterns

The migration was usually from small towns to the city wherein, people migrated to Bengaluru from outskirts locations of Kanakapura, Kolar, Mandya, Mysore, Hassan in search of jobs. Two to three auto drivers were found to be commuting daily from these areas and had to travel almost 25 kilometers each way. The union group of auto drivers claimed that most of the migrant auto drivers in Bengaluru were driving volvo cars (that serve as share autos) and not proper auto rickshaws. A sense of animosity was sensed for the migrant drivers as the union members referred to them as ‘outsiders’. The general sentiment was that the police officials were partial towards the migrants as is evident from this statement, *“Police people do not touch them. They are in the field without license and vehicle documents. The police are supporting them in spite of that.”* In Chennai, across all four groups it was observed that there were very few migrants who mostly came in from the nearby districts. Very few migration trends were found in both cities. The union group members knew a few auto drivers who migrated from Bihar and usually operated in Banaswadi area in Bengaluru. There were some drivers who migrated from Telangana to Chennai who would visit home once every month. Since a significant proportion of auto drivers are from the respective cities, taking prolonged professional breaks for making hometown visits was not prevalent.

### 3.7. Health Profiles

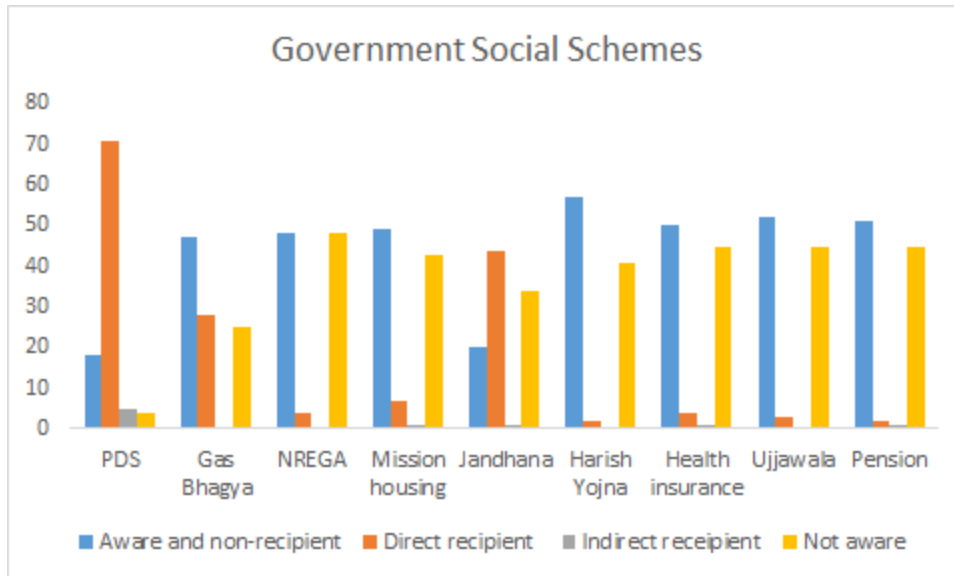
The group discussions highlighted a few major illnesses that are specifically caused because of auto-driving such as tuberculosis, dust allergies, asthma and stress due to traffic. Contradictory information was obtained from the surveys in Bengaluru as out of 113 responses in the sample, 91% respondents did not attribute their health hazard to the profession directly which indicates at low level of awareness on professional hazards. Out of the 122 respondents, 50% had been hospitalized in the last year and they suffered from chronic diseases like asthma, breathing problem, Tuberculosis, chest pain and diabetes. Out of 80 responses obtained, 75 people reported to have fallen ill in the last 3 months due to the aforementioned diseases. Auto drivers from the elderly age group in Chennai discussed how driving the auto for 40-45 years inevitably induces lower back pain, muscular pain in limbs, hearing and eyesight issues. One auto driver from Bengaluru also shared, *“Many auto drivers also complain of piles problem. But most of us don’t seek treatment for the same in the fear of being looked down upon or social stigma. It is a typical problem for us as there is too much heat generated in the autos, especially 2-stroke autos.”*

Alcoholism is a problem among the auto drivers and consumption of alcohol is rampant in Chennai where auto drivers consume anything between a quarter to a half bottle of alcohol, almost every night which has significant health impact.

There was a desire for economic mobility as the auto drivers in the network group in Bangalore hoped to access formal health care but admitted that they could only afford to visit government hospitals. Very few auto drivers have access to subsidized public health facilities with the help of their BPL cards. But for any other emergency illness, drivers are forced to take loans. There was negligible coverage of health insurance as 99% respondents did not have a health insurance cover out of the 148 respondents who reported on the variable. Out of the 362 financial dependents overall, 96% did not have a health insurance.

### 3.8. Access and utilization of schemes

The sense of marginality borne by auto drivers is well-articulated in the statement “We are invisible to the government”, as reported by an auto-driver in Bengaluru. In this context, it is essential to look at the formal and non-formal benefits that can generate convenience and ease operations. While the formal benefits may be in the form of social schemes, non-formal benefits may be in terms of facilities that are provided on transit- including accident reliefs, mobile toilets, affordable meals etc. From the graph below it is clear that the public distribution scheme has the highest number of recipients with a huge difference from the remaining schemes. The state level scheme, Mukhyamantri Santwana Harish Yojna is quite relevant for auto drivers as it provides free medical treatment to road accident victims. Although a little over half the respondents in the sample are aware of it, they are not beneficiaries of the scheme. The table below depicts the level of access and utilization of social schemes.



Auto drivers from the union group in Bengaluru shared that the situation of obtaining a house on rent is a problem as owners do not trust them with rent payments. The only subsidies that the auto drivers have access to are as part of the schemes available for SCs and STs. With respect to food availability in Chennai, most auto drivers carry lunch from home. 'Amma' canteens are spread all across the city providing low-cost meals to people. For those who cannot even afford that, they eat from roadside stalls or have a quick meal (idly, vada, etc.) during the day and eat well at night.

### 3.9. Additional Sources of income

Advertisements placed inside/on the auto rickshaws have emerged as a gainful way of earning extra income. The auto drivers in Chennai largely stated that they were paid 50 INR per month for putting up a single banner on their autos. The advertisers conduct surprise inspections to check if the advertisements are being hosted for the agreed period of time. In many cases, instead of cash the auto drivers are offered a gift in the form of a bucket, lunch box, and in certain cases access to one of their services or other collaterals. For instance, one auto driver in Bengaluru received three tickets to the circus for displaying the details of the same on his auto.

## CHAPTER 4

### PROFESSIONAL ENGAGEMENT

The current chapter aims to analyze a plethora of themes to understand the different ways by which drivers are engaged in the profession of auto driving. The chapter studies various features of the auto rickshaw as an income generating asset, the different kinds of services operating in both cities and the different categories of capital and operational costs involved in the profession. These themes will throw light on potential ways of making the profession more viable.

#### 4.1 INTRODUCTION TO PROFESSION

##### 4.1.1. Entry into the profession

In both cities of Bengaluru and Chennai, it was found that there were no formal or informal networks in place that particularly introduced auto drivers to the profession. It emerged from the discussions that most people joined the profession through personal networks of friends or relatives. Across both groups in Bengaluru, drivers unanimously agreed that it was quite challenging for women to enter into the profession. Further, it anecdotally emerged that the profession of auto driving was made to seem economically lucrative by the existing auto drivers to 'dupe' the new entrants.

##### 4.1.2. Formal Procedures

There are certain regulatory procedures in both cities at the completion of which only, an individual is allowed to take up the profession of auto driving. Attending a training session for seven days is mandatory to get a driving license. In Bengaluru, it is compulsory for every auto to have a DL (driving license) display board which lists down the contact details of the auto drivers. These details can be used as an identifier and complaints can be lodged against the auto driver. Submission of the electricity bill, gas bill and an identity card at the Regional Transport Office (RTO) along with an INR 100 fee charge is a prerequisite to obtain the DL board. In Chennai, every auto driver must obtain a badge from the RTO which entitles him/her to drive the auto in the city. Until recently, education was not a major criterion for obtaining this badge but currently, if the auto driver is a 10<sup>th</sup> pass only then can the badge be obtained. Few auto drivers in Chennai admitted that with a bribe of INR 1000 (13.75 Euro), an 8<sup>th</sup> pass driver could also manage to get the badge. Most auto drivers in Chennai prefer spending a little extra money to hire a broker for obtaining the driving license, registration documents, etc. from the RTO.

#### 4.2 AUTO-RICKSHAW OPERATIONS

##### 4.2.1. Features of the rickshaw

The average number of years that the respondent drove an auto was 4 years old with the most recent one driven for 3 months and the oldest one for 21 years whereas the life-cycle of an auto is optimally 7 years. 95% of the autos in the sample used LPG and were 4-stroke engines and, all autos had a digital meter. The average reported mileage of the autos was 19 kms/liter.

#### 4.2.2. Nature of profession

The nature of engagement with the profession was split into three categories: owner-drivers, drivers who were employed by another person and renter-driver. From the sample of auto drivers in Bengaluru; 81.3% were owner-drivers, 14.7% were non-owner hired drivers and 4% were non-owner rented auto drivers. The non-owners rented it from a friend in most cases. From the discussions it emerged that auto drivers took loans in most cases to purchase an auto. However, because of their inability to pledge their assets, banks refuse to give loans to auto drivers. Thus they were forced to borrow money from informal sources such as private moneylenders and finance companies via the medium of brokers. A few auto drivers did manage to take bank loans but are later unable to pay monthly instalments on time.

The respondents have been engaged in auto driving on an average for 13 years. The longest duration of engagement has been 40 years and the shortest duration has been only 2 months. 52% respondents stated that they wanted to continue with this profession for their entire lifetime. 20% said that they would continue till retirement and for the remaining the average period was 7-8 years. Majorly, the drivers took prolonged breaks for two reasons: festivals and during illnesses.

#### 4.2.3. Operational Variabilities

Auto rickshaws provide two kinds of services: taxi-like and bus-like. Taxi-like services ply different customer(s) on different rides exclusively while bus-like services ply passengers on a sharing basis on the same ride. From the sample studied in Bengaluru, 87% respondents offered only taxi-like services, 10% respondents offered both taxi and bus like services and 3% respondents offered only bus-like services. However, it must be noted that shared auto services have been deemed illegal in Bengaluru. The average distance covered over the weekends on a daily basis is 140 kms with a median of 120kms and the standard deviation as 71 kms. The average distance covered over the weekdays on a daily basis is 220 kms with a median of 150kms and standard deviation as 172 kms. On a normal weekday and weekend, the median number of rides is 8 and 5 respectively.

#### 4.2.4. Viability of routes

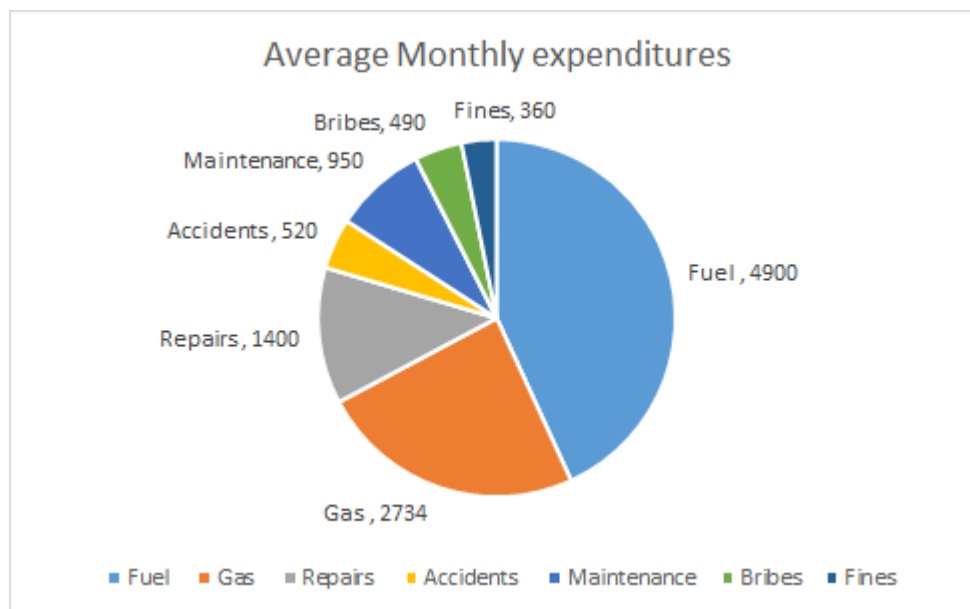
Different areas in the city possess different characteristics that influence the scope and nature of auto rickshaw operations in the city that was effectively brought up during the group discussions. In Bengaluru, maximum competition is seen in the areas of Majestic, near the bus station, Marathahalli, railway station area, Yelahanka, Vydehi hospital, KR Puram, Horamavu and BVK Iyengar road. The union members listed down JP Nagar, Koramangala, Electronic

City, and Madiwala as areas with definite availability of passengers. The auto drivers in the network claimed that there is more business nearby factory areas in the morning and evening times. Because of increased presence of cars, there is little auto rickshaw business in the HSR layout. Near the Majestic area, it is very difficult to get a trip back as there is a lot of police control and thus the auto drivers compensate for the same by charging for luggage. Police inspections are maximum in the city market area and Mysore road.

On the other hand in Chennai, the busiest areas are Egmore, Central. T.Nagar, Parrys, Saidapet, CMBT, MC road, and Vadapalani. The peak traffic hours in Chennai are from 8 am to 12 noon and 5pm to 9 pm in the evening. The scope for understanding route viability in Chennai is not expansive since these are largely dependent on qualitative information shared during focussed groups, wherein the sample is not representative of the entire city.

#### 4.2.5. Financial viability of the profession

Auto driving involves expenditure on various heads; some of which are on regular basis and some of them are one-time costs. The questions in the survey separately inquired on both these kinds of capital and operational costs. With respect to capital costs, the median purchasing price of the auto was INR 153000 (2103.38 Euro) and 60% of the respondents bought it on credit. Among these, the source of credit was bank loan for 60% of the borrowers. The operational costs incurred on these autos is shown in the following graph:



The largest proportion of monthly expenditures is incurred on fuels and gas. As against the expenditure, it is essential to understand the incomes earned by the auto drivers as well. The median daily collection of hired auto drivers was INR 650 (8.94 Euro) and the median income as an auto driver is INR 12,000 (164.97 Euro) per month.

The current market prices of autos was estimated to understand the value of their asset. On an average, the estimated current price of an auto which is less than 3 years old is INR 1,16,600



(1602.96 Euro) for an auto which is between 3 to 6 years old it is INR 1,06,100 (1458.62 Euro) and it is INR 91,650 (1259.96 Euro) for an auto which is more than 6 years old. The auto drivers attributed a number of reasons for the decline in their income. 24% respondents stated that their income decline was due to other modes of transportation, 37% was because of app based autos, 34% was because of app based taxis and 5% said it was not applicable to them.

#### 4.2.6. Customer Engagement

Auto drivers in Chennai admitted that sometimes they charge the customers more because they have to make a lot of rides without passengers. When they take office-goers as passengers, there is no haggling as everyone knows the fixed prices from point A to point B. There are numerous instances in Bengaluru when passengers leave their belongings in the autos and the drivers are taken to task by the police.

Customers are especially cordial with female auto drivers, for instance, they ask them before lighting a cigarette in the auto. Sometimes passengers pay more than the promised amount stating that 'you are a woman so it must be hard for you. Take some extra money'.

## CHAPTER 5

### ENVIRONMENTAL SUSTAINABILITY

The pollution control board is responsible to monitor the overall air quality and set up enforcement mechanisms to check emissions and pollutants from all kinds of sources such as industries, construction, vehicles and so on. This chapter explores the measures undertaken to check pollution levels in both cities and analyzes the scope for environment-friendly options with respect to auto rickshaws.

#### 5.1. Pollution Control mechanisms

Since factors such as the vehicle design, engine types have a bearing on the emissions levels of the vehicle, the monitoring of the same has been outsourced to the Transport Department who set the emission limits for different kinds of vehicles. For auto rickshaws in Chennai, the Carbon Monoxide emission limit is set at 3.5% in volume and Hydrocarbon emissions is set at 4500 ppm. If the auto rickshaw crosses these limits then the driver is refused the Pollution Under Control - PUC certificate that needs to be renewed every 6 months. The auto drivers must produce the registration documents in order to get their rickshaw checked.

According to statistics, 42% of the total emissions in Bangalore comes from vehicle source. However there has been no bifurcation of the source based on types of vehicles. Hence it is difficult to point out the contribution of auto rickshaws in particular.

There are 24 emission testing centres in Chennai, all of which are privatized but regulated by the RTO. According to the owner of an emission testing center in Chennai, on a daily basis about 5-7 drivers get their autos checked and 1-2 autos get rejected on an average. As explained by the PUC employees, this usually means that the auto needs to be serviced and/or there is less oil in the engine. Such instances occur mainly because of two reasons. One, because of less education, the auto drivers are less aware and do not maintain their autos well. Two, the rented auto drivers do not bother to service their autos and maintain it. In Bengaluru it was found from the surveys that out of the 90 responses, 86% had emission test certificates.

As per a senior official in the Karnataka Pollution Control Board, there are a number of institutions involved in the process and hence coordinated efforts are required from a number of parties such as the manufacturers, users, customers, traffic police officials, transport departments and the Pollution control boards in order to switch to cleaner fuels.

#### 5.2. Change of Engine

In Bengaluru, authorities admitted that a plan to shift to CNG-run autos and usage of 4-stroke engine is in the process of being implemented but there is no specific timeline set for the same. There is a risk that initially not all drivers might welcome it citing high maintenance costs as the explanation. But the authorities feel that with time, as the alternative is found to be cheaper and better, the auto drivers would adapt to it.

All auto drivers in the union group unanimously agreed that 4-stroke engines are more environment friendly. Amidst the network group of auto drivers, a peculiar explanation was found between the usage of four-stroke engines and health relief. Four-stroke engines work on self-start button and hence less problematic to pull the lever to start the engine. The drivers claimed that this has helped in reducing back pain and heart problems.

### 5.3. Fuel change

Vice President of the union group, Ateeq Ahmed, said the introduction of LPG was a boon to most auto drivers as it made the profession more economically viable. However, they also supported the likely implementation of CNG in future stating that the same would be both cheaper and environment-friendly. But in another FGD it was found that there was resistance to the use of CNG as it was perceived that gas requires high maintenance and, increased costs to shift to a different model. Even for LPG, there are very few stations in Chennai so the auto drivers are wary of the availability of CNG stations in the city.

### 5.4. Reaction to a battery-operated model

There is a lot of resistance to switching to battery operated autos by the auto rickshaw drivers especially in the city of Chennai. These autos need to be charged every 6 hours and the drivers considered that as a great loss of time. The battery operated rickshaws require charging points at various points in the city or one needs to charge it at their own house. As explained by one auto driver in Chennai, the government provides 100 units of electricity to a self-owned household. But most of the auto drivers take houses on rent making it difficult to access and utilize electricity for auto rickshaw charging.

## CHAPTER 6

### CHALLENGES TO OPERATION

The services and operations of the auto rickshaws is affected by a variety of external and internal factors that exist in the ecosystem. As a result of high levels of informalization and low levels of regulation in the industry, auto rickshaw drivers face a number of challenges both in the long-term and on a daily basis. As a first step to make this profession more viable and a lucrative livelihood for the drivers, solutions must be directed to solve these basic problems existing in the industry.

#### 6.1 Congestion problems

Given the burgeoning urban population of cities, management of traffic has become a major priority for the departments of road transport and traffic. The Roads and Transport Authority sets quotas for the number of vehicle permits to be issued each year that currently stands at 1,25,000 sanctioned permits. As and when the quotas are announced, applications are distributed and permits are issued accordingly. According to the representative from the road transport department, in 2011-12, a quota for 40,000 permits was issued out of which 4,500 permits were under the women and handicapped quota. The major responsibility of the traffic department is to reduce stagnation of vehicles on the road that generally leads to congestion. The Assistant Commissioner of Traffic Police in Bengaluru aptly explains congestion problems of the city as caused by the auto rickshaws:

*“An auto is meant to carry/serve four people including the auto driver which is referred to as the Passenger Capacity Unit (1 PCU = Auto driver + 3 customers). Most of the times a single auto is carrying a single passenger and there are two people short of the PCU. This means that the remaining two people are taking separate commuting options, thereby leading to road congestion. Bangalore has a population of 1,25,000,00 and the city’s vehicular population is 62 lakhs (registered number of vehicles). This means that more than half of Bangalore city’s population does not have private transport options for commuting. From the total population, if we assume that 80% commute daily to work both ways, the total trips required per day is 1,60,000. Metros as a mass transportation service only caters to 10 people per kilometre since the track is only 41 km long currently. There are only 1.3 lakh autos in the city to cater to this remaining population which exposes a huge gap between the demand and supply.”*

Other factors contributing to congestion in the city is the location of auto stands at critical traffic junctions/signals and the parking of auto rickshaws at the bends and turning points of the main road.

#### 6.2 Major complaints

The traffic department has the legal provision to take defaulters to court for cases of charging excess fares and refusing service to customers. This is called as the Permit Condition Violation wherein the court charges fines ranging from Rs. 1000 to Rs. 5000 depending upon

the magistrate. Only when there is a receipt given against the fine paid, the case can be cleared. There are times when the auto driver does not have enough money to pay up the fines in which case the vehicle is seized and the driver borrows money from friends to clear the fines. The traffic constables also take legal action against auto drivers who misbehave with women or cheat them. But such enforcement measures would only work if the passengers approach the police freely.

The maximum number of cases filed against auto drivers is because of excessive charging. Even after the expiration of their fitness certificates, many auto drivers continue to drive their autos which is illegal.

The major challenge faced by the traffic department in Bangalore is that most auto drivers migrate from rural areas with very low levels of education and thus generally less aware about pollution issues, traffic rules and safety measures. Amongst other problems, auto drivers do not follow lane driving, drive outdated vehicles leading to pollution, charge excess money and refuse trips to passengers. In Bangalore, it was reported that such instances occur mainly in areas of Dickenson Road and Commercial Street as these are the primary shopping zones for ladies. Drivers sometimes take passengers in the presence of the police and after traveling a certain distance, dump the passengers without an explanation.

As stated by a former traffic police authority, a large number of auto drivers do not have the proper Driving license display boards and/or the documents related to insurance, registration, permits, emissions. This happens in specifically two cases: drivers who have rented autos and drivers who have bought their own autos by taking loans. In both cases, the relevant documents are either with the owner or with the banks/money lenders. This leads to further complications as the auto driver does not invest in the maintenance of the autos or in case of accidents, simply abandons the auto and elopes. According to the same official, drinking and driving was another major complaint filed against auto drivers.

### 6.3 Other issues

Certain issues particularly exist with auto drivers due to the nature of the profession as cited by a traffic police constable in Chennai. For example, auto drivers tend to hang around and chat in groups of 4-5 people that leads to local brawls and conflicts often. The traffic department has also observed cases of a single auto being driven by multiple drivers through a group loan. The traffic police officials also complain of illegible number plates with decorative fonts.

### 6.4 Grievances of auto drivers

Auto drivers lose a lot of time in traffic jams, especially as waiting time and driving without passengers. This is a huge negative for the auto drivers. Auto drivers also face a number of

issues from the police as well. An auto driver narrated an incident of how a policeman dressed up in civil clothes tricked him and put him to test. There have also been instances where policemen snatch away their driving licenses and refuse to give it back. Policemen tend to favour auto drivers who salute to them and provide them facilities. Auto drivers should have the right to refuse certain unprofitable rides but it backfires when the customer lodges a complaint against them. Auto drivers also pay the maximum fines amongst all vehicle owners and are not aware enough if they are charged for false cases. There is a separate Regional Transport Officer for auto rickshaws who deals with the concerns of auto drivers through an application system with respect to issues such as transfer of permits, renewal of permits and replacement of old vehicles.

## 6.5 Competition

### 6.5.1. Tech-based apps

Competition has increased manifold over time for auto rickshaws owing to a number of reasons. With the advent of technology based applications such as Ola and Uber, most of the passengers have shifted to cabs that offers additional features of GPS tracking, pick-up from doorstep, passenger ratings and in recent times, optimal option of ride sharing. Congestion pricing, a mechanism to economize a route during peak traffic hours is not done by Ola/Uber services which is why most passengers prefer it over auto rickshaws. To negotiate with competition it was found from the surveys in Bengaluru that 17% changed their route plans, 16.5% increased their trip fares, 32% increase work hours, 19% shift their working hours, 8% decreased their trip per fare, 5% started passenger pooling (sharing) and 2.5% stated others as a solution.

One auto driver from the auto stand outside the Chennai railway station aptly put, “Ola charges INR 3/km (0.04 Euro)/km and autos charge INR 12/km. (0.16 Euro)/km then who would not want to take an Ola over an auto?” The auto drivers in Chennai unanimously agree that *Fastrack* is a legit cab service running in Chennai as they charge their customers fairly, thus not posing as a potential threat. A few tech-based apps have emerged solely for auto rickshaws such as Utoo, Namma Auto, etc. but the auto drivers are not educated or aware enough to use it. There was a particular instance narrated by the auto drivers of the Chennai Central pre-paid auto stand wherein Ola provided smartphones to a group of 100 auto drivers so that they can register themselves on the app. About 20 of them started using it for their personal purposes and the same was detected through the IMEI number. Hence all the mobiles were taken away and Ola was discouraged from introducing schemes in the future.

### 6.5.2. Parallel services

In Bengaluru due to the technological boom, there is a large proportion of migrant population working in the IT sector. To cater to this population, software companies have started plying

cabs for their employees. Recently, the auto drivers in the union group also claimed that there has been an increase in the number of BMTC (**Bengaluru Metropolitan Transport Corporation**) buses in the city who have begun the service of providing daily passes to their passengers. Both these factors has made daily commuting very easy for passengers and indirectly affecting the livelihood for auto drivers. In Chennai, a number of vans and Volvos have started plying as share autos inside the city areas. Passengers prefer these over the autos that run as taxi-like services as they have to pay less thus affecting the regular auto rickshaws that run bus-like services.

### 6.5.3. Other factors

Another prominent change in the city affecting auto-rickshaw driving has been that of the change in location of the airport in Bangalore. Since the time the airport has moved to the outskirts of the city, auto drivers in the union claim that their incomes have fallen by a good 60%.

## CHAPTER 7

### EXISTING SOLUTIONS AND THE WAY FORWARD

The auto rickshaw industry stands at the nexus of a variety of stakeholders: an informal sector, presence of legal acts and government regulations and passenger demand. Thus, the solutions to arrive at an economically viable and environmentally sustainable livelihood requires involvement of all the stakeholders at each stage. Auto rickshaw drivers have developed coping mechanisms to tackle the existing challenges in the industry while also capitalizing on certain initiatives taken by the concerned authorities. The present chapter identifies the gaps prevailing in the implementation structure and lists down various recommendations to smoothen out the industry.

#### 7.1 Current state-level Initiatives

A number of initiatives are undertaken by various departments in the ecosystem to ensure smooth functioning of the auto rickshaw industry. The Bangalore traffic department has set up prepaid auto stands at forty four busy locations in the city such as M.G. road and Majestic so that drivers are ensured definite passengers from here. During peak hours in Chennai, manpower is increased especially in traffic prone zones such as Poonamelly, Anna Salai, ECR, OMR and GST road. During the day, the traffic signals function automatically but during peak hours, the traffic is managed manually. Depending on the direction of the traffic, the traffic police officials divert the vehicles as well. But this again affects the usual routes taken up by auto drivers who thus end up over charging their customers.

The transport department in Bangalore is in the process of regulating all tariff rates and setting a standard minimum price for the distance covered by autos. A huge project is under progress where the department is planning to establish traffic control rooms and a standardized system of metered rates. An app named B-safe was also launched for the customers to calculate the exact fares, shortest possible routes, etc. and despite active campaigning, not many people are aware of this app.

Currently there is a reward system in place in to incentivise auto drivers to perform better and offer more than the service of auto driving. When auto drivers return passengers' belongings to the police station then they are rewarded by the commissioner in Chennai and are also brought to the attention of the media and publicized. Currently the Bangalore traffic police has set up camps and helps auto drivers with driving license, emissions test and connects them to RTO officials. There is also a Traffic Safety week organized by the Bangalore Traffic Police with the Police department wherein the Deputy Inspector and his team visit auto stands and explain safety features/surveillance methods, cameras, challan info, etc. The traffic department conducts awareness sessions with auto drivers regarding a number of issues such as anger management, defense techniques, etc. Here also, well-behaved auto drivers are recognized and rewarded well. The Bangalore traffic police has also roped in actor Sudeep to be the brand ambassador for auto rickshaw drivers.



A police constable interviewed near Egmore shared his views on the models of social enterprises. He believes that most auto drivers in Chennai are uneducated and a character change is what is required. The auto drivers will not cooperate with an external entity especially if it is from the private sector and only the government can bring about sustainable change. At present, there are initiatives such as Namma/Makkal Auto in the city of Chennai but they are all profit-oriented. The owners of such enterprises have good credibility to procure loans from banks as a result of which they buy autos in bulk and give them out on rent. Since the focus point of such businesses is profits and not welfare of the auto drivers; such programs are not sustainable and prevalent on a large-scale.

## 7.2 Auto driver networks

### 7.2.1. Auto unions

Auto unions as formal associations or groups of auto drivers help in increasing their bargaining power with city residents and officials alike. Auto drivers across all groups agree that unions provide them a sense of solidarity to voice out common issues pertaining to drivers. Although there are no exclusive financial benefits for members of the union, they have an edge over the non-union members over certain aspects. “Being members of auto union's commands a little respect from police who otherwise treat you very badly,” shared Syed Ateeq Ahmed, the Vice President of the union. Union affiliations also helped them to deal with unexpected accidents, license seizures, dealing with the police and so on. Meanwhile the Egmore back gate rickshaw drivers are all part of a union called “Makkal Paadgaap Perrivay Madhya Chennai, Egmore” with about 60 members. Again, there are no special financial benefits as part of this union but it gives them leverage in case of internal conflicts. There is an informal savings system created by the members of this union wherein each member pays 20 INR (0.27 Euro) every day and the pool of money is used for common purposes such as Dussehra puja, puja for the auto, etc. once every year. There is a difference of opinion among the leaders of the union to use this money more productively. The Egmore station front gate rickshaw drivers feel that being a part of an union increases responsibilities as one needs to do more favours for the union leader and membership fees to the union is also unaffordable.

### 7.2.2. Informal Associations

The drivers in Bengaluru preferred the auto networks they were a part of to connect with an individual owner/renter system. These networks have eased the job, otherwise depending on moneylenders who charge high interest rates. These networks also helped in speeding up the process of getting the driving license through a reference letter. At the Chennai central prepaid auto stand, the auto drivers work as an informal group but not necessarily as a union. At the time of a death ceremony or a marriage, each auto driver contributes money (an amount to their wish) and pools in to help a fellow auto driver. There is no membership to join this group. One can become a prepaid auto driver only through networks and sometimes bribes.

### 7.2.3. Negotiations with stakeholders

Unions usually complain for more space in auto stands which is not feasible at all times. If there are more auto rickshaws more than the capacity of an auto stand, rickshaws start parking anywhere on the roads adding to the congestion and lane capacity problems. Auto union members are specially invited for awareness drives as they are important transit points in the network. RTO interact with union leaders only when the auto drivers raise their personal concerns. Often auto drivers have no educational qualification and hence they are unable to fill application form particulars. Union leaders represent them and usually come along with the concerned drivers and their complaints. Mostly unions come to negotiate when suspensions are recommended to certain drivers. In another FGD, it was observed that auto drivers strongly preferred networks or groups of auto drivers to be associated with over unions. The network system at least gives them access to other benefits such as low-interest loans, savings schemes, etc. while they have not benefited much from unions till date.

The only time auto union's approach the traffic department is when they would want to set up at an auto stand at a particular spot. Negotiating through a union increases the bargaining power of the auto drivers. A traffic constable at the Egmore Pantheon junction shared how dealing with auto driver unions becomes quite dicey.

*“There is hardly any cooperation among the union members. Whenever one of their members is in trouble, say with respect to an accident or an arrest then the leader will step up to save him. But if the auto driver is himself at fault and we ask the leader to cooperate with us and get him to the police station, then they would back out. The leaders would then say that the driver would not listen to him.”*

This means when there are legitimate cases filed, there is no element of unity and cooperation amongst the union members.

## 7.3 Recommendations

The following section lists down a number of measures that can be adopted to achieve the objectives of economic and environmental sustainability for auto rickshaws. These solutions have been derived on the basis of the issues raised in the previous chapter and the gaps observed in the current implementation structure from the current chapter. Many of these recommendations have been suggested by the auto drivers and the officials in the course of the study.

### 7.3.1. Policy-specific recommendations

1. Provision of affordable housing and housing societies for auto drivers could be a potential solution for curbing experiences of discrimination in the city. An auto driver cited that *bidi* workers have a separate colony built for them and their families are provided with accidental benefits of INR 2 lakh (2749.51 Euro). To avail the same kind of facilities, auto drivers have to be part of unions and also pay up for the insurance policies. There is already a certain level of skepticism pertaining to auto drivers on the

and given that the housing rent is fairly high the auto drivers were of the opinion that separate housing colonies for auto drivers and particularly migrants could be a solution to curb discriminating experiences in the city. With unaffordable rent and skepticism among house owners to rent to auto drivers; a separate colony for auto drivers, especially migrants, would be advantageous.

2. Provision of educational loans at nominal interest rates for betterment of the children so that they are not caught in the inter-generational trap of auto rickshaw driving as a livelihood.
3. Health insurance can be made available to all auto drivers by making Yeshashwini scheme accessible to all auto drivers. Yeshashwini scheme is a very successful model of self-funded and sustaining health insurance scheme. As of now it covers only rural farmers in it and there is potential of it being extended to other marginal groups.
4. A prepaid auto stand outside a metro station could make the city transportation viable
5. App based solution is welcome, but, the implementation and operation might be slow since most drivers belong to rural areas. To counter this, GPS facility can be installed in autos to bring it at par with tech-based apps as it raises the reliability quotient of the auto, as suggested by the Deputy Commissioner, Traffic.
6. Concept of shared autos must be made legal in Bangalore so that people from the lower economic strata can afford it and the drivers also find it convenient. Although buses and metros are available everywhere, they do not provide last mile connectivity. But to make this possible, changes need to be made in the Motor Act.
7. Auto rickshaws need to be redesigned so that the weight limit of the automobile is corresponding to the speed of the vehicle.
8. The public transport system should be expanded to reduce private vehicular strength.
9. A combined appeal to reduce the amount of premium for auto insurance as they are not even worth the claims. Or at least for different models of autos, there should be different premium amounts so the damage is compensated fairly.
10. Helpline number is needed for auto drivers so that they can also complain against passengers
11. Autos must soon operate zone-wise like it does in Mumbai. North Chennai auto drivers to ply between bus stops, metro stations and houses solely in north Chennai and so on.

### 7.3.2. Incentivization processes

1. Campaigns and wide publicity have been proved to be really successful in the past like that of the reward system implemented by the Bangalore Traffic Police. Any good behavior such as returning a lost object, helping passengers especially women and children gets publicized, widely on social media. If not social media, communication can be done through other parties such as the transport department or union leaders or through distribution of flyers. Seminars are also a good way to introduce new projects and spread awareness on road safety.

2. Incentives should be provided to auto drivers to get rid of their old autos and subsidies should be given to switch to cleaner fuels. A rebate of a certain amount on the price of gas should be made from the government. For instance if LPG is INR 100 (1.37 Euro) then government should pay INR 10 (0.14 Euro) and auto drivers pay INR 90 (1.24 Euro).
3. A common expense card for all kind of public transport needs to be incorporated wherein through one single card one can access multiple modes of transport.
4. A combined appeal to reduce the amount of premium for auto insurance as they are not even worth the claims. Or at least for different models of autos, there should be different premium amounts so the damage is compensated fairly.
5. All kinds of insurances should be under one head: accident and medical, which means it should cover both: death and injury. If possible, have the same for the family members too.

### 7.3.3. Building capacity

1. A synergy between auto unions and non-governmental organization may help in sensitizing autodivers and raise awareness and enable access to relevant schemes subsequently leading impacting their economic standards.
2. Progressive training needs to be given to auto drivers that can help improve their language, skill set and attitude towards passengers. It's all prescribed and proposed in the Road Safety Act, 2015. It will also help with issues like rash driving and rude behaviour towards passengers.
3. Replicate the SHG model for creating savings among auto drivers. Create a group of 20 people and elect 3 people as heads and save collectively. Just like people withdraw money from ATMs, auto drivers need a similar facility without having to open a bank account.

SUMMARY TABLE: KEY ASPECTS

BENGALURU	CHENNAI
<b>DATA COLLECTION METHOD</b>	
<ol style="list-style-type: none"> <li>1. Survey</li> <li>2. Focused Group Discussions with auto drivers and auto driver</li> <li>3. Key Informant Interview with RTO, PUC officials and Traffic Authorities</li> </ol>	<ol style="list-style-type: none"> <li>1. Focused Group Discussions with auto drivers and auto driver</li> <li>2. Key Informant Interview with RTO, PUC officials and Traffic Authorities</li> </ol>
<b>FINDINGS</b>	
<b>Awareness level on clean fuel</b>	
<ol style="list-style-type: none"> <li>1. Sample population had access to LPG</li> <li>2. Enabling policies to expedite adaptation of clean technologies through incentives to suitable vehicle models</li> <li>3. Disincentivization of old models is required to discontinue older models</li> </ol>	<ol style="list-style-type: none"> <li>1. Low awareness levels on clean fuel technology</li> <li>2. No such policies yet formulated</li> </ol>
<b>Mode of operations and extra income</b>	
<ol style="list-style-type: none"> <li>1. Taxi like service, shared autos are discouraged</li> <li>2. For banner and advertisements compensations received more in kind</li> </ol>	<ol style="list-style-type: none"> <li>1. Bus like service</li> <li>2. INR 50 received for each banner</li> </ol>
<b>Networks</b>	
No strong union networks	
No such formal or informal networks of entry	



# ANNEXURES

**LOGICAL FRAMEWORK FOR THE PROJECT**

	<b>Objectively verifiable indicators of achievement</b>	<b>Sources and means of verification</b>	<b>Assumptions</b>
<b>1. Impact: Promoting sustainable lifestyles and poverty reduction while reducing CO2 emissions and air pollution in India.</b>			
<b>1.1. Specific objective: Reduction of emission rates and improvement of the HDI indicators in India</b>			
	<p>The CO2 emissions caused by the auto-rickshaw sector in the area of intervention has decreased by 30%</p> <hr/> <p>Reduction of PM10 by 30%</p> <hr/> <p>Improvement of the HDI indicators of India and specific intervention states</p>	<p>Government Records and statistics            UNDP Human development report (Country-level and State-wise data)            UNEP reports and publications            Central Pollution Control Board (CPCB) in India            Poverty Reduction Strategy Paper            Spot checks using sensors and analyzers to test emissions from vehicles to track progress            Spot checks on release of polluting during idling of vehicle</p>	<p>Air quality monitors may not be able to measure the transportation emission levels monitors may not catch air emissions from vehicles from different areas of the city which may be a challenge in accurate acquisition of data.</p> <p>Tracking air quality management strategies and changes in the policy framework are also essential</p> <p>Developing a comprehensive air emission inventory will be more reliable than air quality monitoring data to assess and track transportation emissions</p> <hr/> <p>Sustained efforts are made at acceleration of access to affordable healthcare/ promotion of health insurances</p>
<b>1.2. Outcome: Scale up a replicable and integrated model of sustainable auto-rickshaw transport, based on clean technologies in the Cities of Bangalore, and Chennai</b>			
<b>1.2.1.</b>	<p>The eco-friendly auto-rickshaws in the two cities increase by 5% by the end of the project (baseline: 3-wheeler park 2014),</p>	<p>Regional Transport authority records on vehicle registration            Permit records from the Regional Transport authority            Track owner-driver registration            Record of re-registration of vehicles            Record of Traffic Enforcement authority</p>	<p>Incentivization of CNG based fuel technology to make it more cost-effective for the auto-drivers and hence promote the adoption of sustainable technology</p> <p>In Bengaluru, disincentivization for discontinuation of two stroke models that are registered before 2003 since that are not eligible to avail 30,000 INR incentives for conversion of</p>

		<p>Endline to be compared against current baseline</p>	<p>auto models are made</p> <p>Risk: Over 10,000 auto rickshaws are unregistered in the city of Bangalore (Source:insert)</p> <p>The involved target groups' representatives keep their availability and commitment in participating to the project process</p> <p>Sustainable urban transportation issues remain a key topic in the international and national agenda</p> <p>New regulations introduced by the government are coherent with the project aims and 4-strokes auto-rickshaw remain allowed</p> <p>In Chennai, policy frameworks are made to systematize the eco-friendly technology goals</p>
<b>1.2.2.</b>	<p>At least 80% of the urban passengers targeted: (125.000 being 5% of the total number) choose to use the new environmentally and socially sustainable urban transport model instead of the more polluted ones</p>	<p>Representative samples out of the targeted passengers through an endline</p> <p>Data from aggregators on app based booking in 2016 v/s 2020</p>	<p>Sustainable transportation choices are available through conducive policy structures</p> <p>Regulation of fair fare structure to increase viability, through minimum fare, idling fare and running fare policy</p> <p>Accelerate access to social and financial schemes and financial literacy initiatives</p> <p>Continued efforts are made to raise awareness on sustainable choices</p>
<b>1.2.3</b>	<p>The number of auto-rickshaw drivers adhering to the model increases by 20% each year</p>	<p>Project Report</p> <p>Internal project monitoring (Base: No. of drivers choose to co-opt the model to be compared with endline on no. of drivers who continue to adhere</p>	<p>Risk: discrimination against autorickshaw drivers community.</p> <p>Mitigation plan: the issue is tackled in the Behavioural Change Campaign, strengthen auto union networks</p>



		<p>to the model by the end of the each year disaggregated by:</p> <ul style="list-style-type: none"> <li>-No. Of autorickshaws registered under the program</li> <li>-No. Of autorickshaw continue to use the same model (interim monitoring and endline)</li> <li>-No. Of new autorickshaws registering at each quarter</li> <li>-Feedback session with autorickshaws at the end of each quarter to feed into and refine intervention strategies</li> </ul>	
<p><b>2. Expected Results: By the end of the project</b></p>			
<p><b>2.1. Stakeholder based targets: Passengers</b></p>			
<p><b>2.1.1</b></p>	<p>80% of targeted passengers are aware of harmful effects of 2-stroke auto-rickshaws</p>	<p>Endline to be done with a selected sample to customers directly exposed to the campaign efforts with a control sample</p> <ul style="list-style-type: none"> <li>-Quarterly evaluation on consumers directly exposed to the campaign through spot check vis-a-vis ones who are not to analyze comparative effects of the campaign</li> <li>-Assess efficacy of messaging through a qualitative activity. This will also help in determining frequency and suitable mode for messaging</li> </ul>	
<p><b>2.1.2</b></p>	<p>The number of targeted passengers using 2-stroke auto-rickshaws is reduced by 40%</p>	<p>BCC Baseline and endline Sample survey</p>	

2.1.3	At least 3% of passengers (including tourists) use the App-SMS service for auto-rickshaw reservation in the target area	Sample Survey/ Records from app aggregators	
2.2.	At least 50% of the key stakeholders targeted adhere to the CSR Voluntary Code of Practice	Project reports	
<b>2.3 Stakeholder based targets: Auto-drivers</b>			
2.3.1	The renegotiation of the price episodes by the auto-rickshaw driver is reduced by 30%	Process monitoring, endline sample survey, Reports and records of the organisation of the auto-rickshaw driver and traffic police records.  -Feedback through massessaging services	<ul style="list-style-type: none"> <li>- Economic growth continues to be about 5% per year; economic stability is ensured</li> <li>- There occur no natural catastrophes</li> <li>- Cost of oil does not increase significantly</li> <li>- Cost of 4-strokes auto-rickshaw does not increase significantly</li> <li>- Government maintains a commitment towards environmentally friendly and affordable urban transportation</li> <li>- The definition of political priorities concerning urban transport is based on a transparent and accessible process</li> <li>-The Key staff of the organisations involved keep their position and transfer within their organisation the experience gained</li> <li>- The selected drivers' organizations keep their interest and availability in participating to the shifting process"</li> </ul>
2.3.2.	80% of the auto-rickshaw drivers targeted by the activities adhere to the proposed model	Sample Survey (sample survey)	
2.3.3.	The auto-rickshaw drivers targeted increase their income by 30%  -Increase income through	Reports and records of the organizations of auto-rickshaw driver and comparison with baseline data (conduct endline)	

	<p>extraneous sources such as advertisement</p> <p>-Increase in participation on self help groups and micro finance</p> <p>-Reduction in time period for loan repayment</p>	
<b>2.3.4.</b>	<p>The number of drivers that owns their auto-rickshaw has increased by 70%</p> <p>-Increase in access to government subsidy</p>	Reports and records. Baseline and endline.
<b>2.4. Stakeholder based targets: Service Providers</b>		
	At least 5 new service providers targeted (private companies and financial institutions) defines specific services/ products as suggested by the proposed model	Service providers CSR annual reports
<b>2.5 Stakeholder: Government</b>		
<b>2.5.1.</b>	One institutional discussion panel is active at national, state, and local level	<i>Constitution reports of the panel and its minutes</i> <i>Evaluation report</i>
<b>2.5.2.</b>	City bylaws for the incentive of 4-stroke auto-rickshaws are in the pipeline for Bangalore and Chennai	Press release Key informant interview with traffic departments of the respect states to triangulate Data and reports from municipalities and state authorities
<b>2.5.3.</b>	A Sustainable Auto-rickshaw	Press release

	Action Plan is defined and adopted by the authorities in at least one of the two cities.	Key informant interview with traffic departments of the respect states to triangulate Data and reports from municipalities and state authorities
<b>2.5.4.</b>	At least two best practices identified by the project are appraised internationally and locally	Information platform and networks annual reports Exchange missions reports

## SURVEY TOOL

### INTRODUCTION ಪರಿಚಯ

Hello ಹಲೋ ,

My name is \_\_\_\_\_ and I am from the Namma Auto cproject. We are conducting a study on auto-rickshaws as a sustainable mode of transport system in your city and hence we would like to ask you a few questions. This survey will not take more than 40 minutes. If the respondent agrees, please get the consent form signed by him/her.

ನನ್ನ ಹೆಸರು ..... ಮತ್ತು ನಾನು ಔಟ್ ಲೈನ್ ಇಂಡಿಯಾ ಎಂದು ಕರೆಯಲಾಗುವ ಗುರ್ಗಾವ್ ನಲ್ಲಿ ಇರುವ ಸಂಶೋಧನಾ ಸಂಸ್ಥೆಯಿಂದ ಬಂದಿದ್ದೇನೆ. ನಾವು ನಿಮ್ಮ ನಗರದಲ್ಲಿ ಸಾರಿಗೆಯ ವ್ಯವಸ್ಥೆಯ ಸಮರ್ಥನೀಯ ಮೋಡ್ ಆಗಿ ಆಟೋ ರಿಕ್ಷಾಗಳ ಮೇಲೆ ಅಧ್ಯಯನವನ್ನು ನಡೆಸುತ್ತಿದ್ದೇವೆ ಮತ್ತು ಆದ್ದರಿಂದ ನಾವು ಕೆಲವು ಪ್ರಶ್ನೆಗಳನ್ನು ನಿಮಗೆ ಕೇಳುವುದಕ್ಕೆ ಇಚ್ಛಿಸುತ್ತಿದ್ದೇವೆ. ಈ ಸಮೀಕ್ಷೆಯು 40 ನಿಮಿಷಕ್ಕಿಂತಲೂ ಹೆಚ್ಚು ಸಮಯವನ್ನು ತೆಗೆದುಕೊಳ್ಳುವುದಿಲ್ಲ. ಒಂದುವೇಳೆ ಪ್ರತಿಕ್ರಿಯೆದಾರರು ಒಪ್ಪಿಕೊಂಡಲ್ಲಿ, ದಯವಿಟ್ಟು ಅವನು/ ಅವಳಿಂದ ಒಪ್ಪಿಗೆಯ ಫಾರಂ ನಲ್ಲಿ ಸಹಿಯನ್ನು ಪಡೆಯಿರಿ.

### INSTRUCTIONS TO THE RESPONDENT ಪ್ರತಿಕ್ರಿಯೆದಾರರಿಗೆ ಸೂಚನೆಗಳು.

Responding to this survey might get you some services in the future. Please feel free to stop the survey midway if you wish to opt out of the survey. You may also opt to not answer certain questions if they make you uncomfortable or for any other reason that you may deem fit. Your inputs are valuable and any information that you provide will not be commercially used and shared beyond research.

ಈ ಸಮೀಕ್ಷೆಗೆ ಪ್ರತಿಕ್ರಿಯೆ ನೀಡುವುದು ಭವಿಷ್ಯದಲ್ಲಿ ನಿಮಗೆ ಯಾವುದೇ ಸರ್ವಿಸ್ ಗಳನ್ನೂ ಒದಗಿಸಲಾಗುವುದು ಎಂದು ಖಾತರಿ / ಗ್ಯಾರಂಟಿ ನೀಡಲಾಗುವುದಿಲ್ಲ. ದಯವಿಟ್ಟು ಒಂದುವೇಳೆ ಸಮೀಕ್ಷೆಯಿಂದ ಹೊರಗೆ ಹೋಗುವುದಕ್ಕೆ ಬಯಸಿದಲ್ಲಿ ಸಮೀಕ್ಷೆಯ ಮಧ್ಯ ಭಾಗದಲ್ಲಿ ನಿಲ್ಲಿಸುವುದಕ್ಕೆ ನೀವು ಮುಕ್ತವಾಗಿ ಇರುವಿರಿ ಎಂದು ಭಾವಿಸಿರಿ. ನೀವು ನಿರ್ದಿಷ್ಟ ಪ್ರದೇಶಗಳಿಗೆ ಉತ್ತರಿಸುವುದಕ್ಕೆ ಅನಾನುಕೂಲಕರವಾಗುವಂತೆ ಮಾಡಿದಲ್ಲಿ ಅಥವಾ ಯಾವುದೇ ಇತರ ಕಾರಣವು ನೀವು ನಿಲ್ಲುವಂತೆ ಮಾಡಿದಲ್ಲಿ ಉತ್ತರಿಸಬೇಡಿ. ನಿಮ್ಮ ಇನ್ಪುಟ್ ಗಳು ಮೌಲ್ಯಯುತವಾಗಿದೆ ಮತ್ತು ನೀವು ಒದಗಿಸುವ ಯಾವುದೇ ಮಾಹಿತಿಯನ್ನು ಕಮರ್ಷಿಯಲ್ ಆಗಿ ಉಪಯೋಗಿಸಲಾಗುವುದಿಲ್ಲ ಮತ್ತು ಸಂಶೋಧನೆಯನ್ನು ಹೊರತು ಪಡಿಸಿ ಹಂಚಿಕೊಳ್ಳಲಾಗುವುದಿಲ್ಲ.

### CONSENT FORM

I, \_\_\_\_\_, hereby grant permission to be a part of the Baseline Survey for the study of urban transport system conducted by Outline India for ACRA. I will answer the survey questions to the best of my knowledge.

ನಾನು ....., ಎಸಿ ಆರ್ ಎ ಗಾಗಿ ಔಟ್ ಲೈನ್ ಇಂಡಿಯಾ ನಿಂದ ನಡೆಸಿರುವ ನಗರ ಸಾರಿಗೆ ವ್ಯವಸ್ಥೆಯ ಅಧ್ಯಯನಕ್ಕಾಗಿ ಬೇಸ್ ಲೈನ್ ಸಮೀಕ್ಷೆಯ ಭಾಗವಾಗಿ ಇರುವುದಕ್ಕೆ ಅನುಮತಿಯನ್ನು ನೀಡಿರುವೆ . ನನ್ನ ತಿಳಿವಳಿಕೆಗೆ ಉತ್ತಮವಾಗಿ ನಾನು ಸಮೀಕ್ಷೆಯ ಪ್ರಶ್ನೆಗಳಿಗೆ ಉತ್ತರಿಸುತ್ತೇನೆ.

Respondent signature

Surveyor's signature

ಪ್ರತಿಕ್ರಿಯೆದಾರರ ಸಹಿ

3

ಸಂದರ್ಶಕರ ಸಹಿ

Survey specific information	
Date of survey:	<input type="text"/> / <input type="text"/> / <input type="text"/>
Interviewers name:	<input type="text"/>
Start Time:	<input type="text"/> : <input type="text"/>
End Time:	<input type="text"/> : <input type="text"/>

DEMOGRAPHIC INFORMATION	
1. Name of the respondent ಪ್ರತಿಕ್ರಿಯೆದಾರರ ಹೆಸರು	<input type="text"/>
2. Age ವಯಸ್ಸು	<input type="text"/>
3. Gender ಲಿಂಗ : (Male ಪುರುಷ =1, Female ಮಹಿಳೆ =2)	<input type="text"/>
4. Current residential address ಪ್ರಸ್ತುತ ವಸತಿಯ ವಿಳಾಸ.	<input type="text"/>
5. Original residence (It could be the respondent's' place of birth or one that he considers as his permanent address, such that he would be staying there if he was not staying at his place of work. The address should include the name of the state, district and village/town) ಮೂಲ ವಸತಿ (ಇದು ಪ್ರತಿಕ್ರಿಯೆದಾರರ ಹುಟ್ಟಿದ ಸ್ಥಳವಾಗಿರಬಹುದು ಅಥವಾ ಅವರ ಖಾಯಂ ವಿಳಾಸವಾಗಿ ಪರಿಗಣಿಸುವ ಒಂದು, ಅಂದರೆ ಅವನು ಅವನ ಕೆಲಸದ ಸ್ಥಳದಲ್ಲಿ ವಾಸ ಮಾಡದೇ ಇರಬಹುದು. ಈ ವಿಳಾಸವು ರಾಜ್ಯ, ಜಿಲ್ಲೆ ಮತ್ತು ಹಳ್ಳಿ/ ಟೌನ್ ನ ಹೆಸರನ್ನು ಸೇರಿಸಬೇಕು.)	<input type="text"/>
6. Religion ಧರ್ಮ Hindu=1, Muslim=2, Christian=3, Parsee=4, Sikh=5 Jain=6 Buddhist=7 Others (Specify)	<input type="text"/>
7. Caste name ಜಾತಿಯ ಹೆಸರು	<input type="text"/>
8. Caste Category ಜಾತಿಯ ವರ್ಗ	<input type="text"/>
9. Highest education level (level completed, which is to say that you had appeared for the exam and completed the level) ಉನ್ನತ ಶಿಕ್ಷಣದ ಮಟ್ಟ ( ಪೂರ್ಣಗೊಳಿಸಿರುವ ಮಟ್ಟ, ಪರೀಕ್ಷೆ ಗಾಗಿ ನೀವು ಎದುರಿಸಿರುವುದು ಮತ್ತು ಪೂರ್ಣಗೊಳಿಸಿರುವ ಮಟ್ಟ )	<input type="text"/>
10. Are you the head of the household? (if the current household is a single member household, then do not take this into consideration) Yes=1, No=2 ನೀವು ಕುಟುಂಬದ ಮುಖ್ಯಸ್ಥರು ಆಗಿರುವಿರಾ ? ( ಒಂದುವೇಳೆ ಪ್ರಸ್ತುತ ಕುಟುಂಬದ ಒಂದು ಸದಸ್ಯರು, ನಂತರ ಈ ಪರಿಗನಿಸುವಿಕೆಯನ್ನು ತೆಗೆದುಕೊಳ್ಳಬೇಡಿ )	<input type="text"/>

11. Primary Occupation in the last one year (Take up to 2 jobs)

ಕಳೆದ ಒಂದು ವರ್ಷದಲ್ಲಿ ಪ್ರಾಥಮಿಕ ಉದ್ಯೋಗ (2 ನೌಕರಿ ವರೆಗೆ ತೆಗೆದುಕೊಳ್ಳಿರಿ )

Serial No	Types of jobs (In terms of Engagement i.e. prolonged/continuous engagement) ನೌಕರಿಯ ವಿಧಗಳು ( ತೊಡಗಿಕೊಳ್ಳುವಿಕೆಯ ಸಂಭಂದಿಸಿದಂತೆ ಅಂದರೆ ಪ್ರೊ ಲಾಂಗ್/ ಮುಂದುವರೆಸಿರುವ ತೊಡಗಿಸಿಕೊಳ್ಳುವುದು	Income (mention as Monthly = M, weekly = W daily = D) ಆದಾಯ ( ತಿಂಗಳು, ವಾರಕ್ಕೆ, ಪ್ರತಿದಿನ )	Duration of engagement (Monthly as M, weekly as W, daily as D) ತೊಡಗಿಸುವಿಕೆಯ ಸಮಯ (ತಿಂಗಳು, ವಾರ, ಪ್ರತಿದಿನ	Types of jobs (In terms of Earning	Income (Monthly as M, weekly as W, daily as D) ಆದಾಯ ( ತಿಂಗಳು, ವಾರಕ್ಕೆ, ಪ್ರತಿದಿನ )	Duration of engagement (Monthly, weekly, daily) ತೊಡಗಿಸುವಿಕೆಯ ಸಮಯ (ತಿಂಗಳು, ವಾರ, ಪ್ರತಿದಿನ

12. Engagement with the concerned occupation i.e. auto-rickshaw driving (in the past one year): ಸಂಭಂದಿತ ಉದ್ಯೋಗದೊಂದಿಗೆ ತೊಡಗಿರುವುದು

- Income earned: ಗಳಿಸಿರುವ ಆದಾಯ
- Time spent: ವ್ಯಯ ಮಾಡಿರುವ ಸಮಯ

13. Income received from the following sources in the last year (Yearly, monthly, one time), write NA if not applicable

ಕಳೆದ ವರ್ಷದಲ್ಲಿ ಕೆಳಗಿನ ಮೂಲಗಳಿಂದ ಸ್ವೀಕರಿಸಿದ ಆದಾಯ (ವರ್ಷಕ್ಕೆ, ತಿಂಗಳು, ಒಂದು ಬಾರಿ )ಅನ್ವಯವಾಗದೆ ಇದ್ದಲ್ಲಿ ಏನ್ ಎ ಎಂದು ಬರೆಯಿರಿ.

- Income received from land (Agricultural land or real estate) :  
ಭೂಮಿಯಿಂದ ಸ್ವೀಕರಿಸಿದ ಆದಾಯ (ಕೃಷಿ ಭೂಮಿ ಅಥವಾ ರಿಯಲ್ ಎಸ್ಟೇಟ್ )
- Unilateral transfer (remittances/gifts received) : ಏಕ ಪಕ್ಷೀಯ ವರ್ಗಾವಣೆ

14. Marital status (Married =1, Unmarried=2, Widowed=3, Divorced=4, Separated=5): ವೈವಾಹಿಕ ಸ್ಥಾನಮಾನ						
15. No. of children: ಮಕ್ಕಳ ಸಂಖ್ಯೆ						
16. Total Household income (monthly in the last one year) (at the place of residence) ಕುಟುಂಬದ ಒಟ್ಟು ಆದಾಯ (ವಸತಿಯ ಸ್ಥಳದಲ್ಲಿ):						
17. Size of family (at the current place of residence) ಕುಟುಂಬದ ಸೈಜ್ (ವಸತಿಯ ಪ್ರಸ್ತುತ ಸ್ಥಳದಲ್ಲಿ):						
18. How many family members are dependent on you financially? Please populate the following table accordingly wherever applicable ಹಣಕಾಸಿನ ಅವಲಂಬಿತರ ಮೇಲೆ ಮಾಹಿತಿ ಇದು ಪೂರ್ಣವಾಗಿ ಅಥವಾ ಭಾಗಶಃ (ಅರ್ಹವಾಗಿ ಇರುವವರನ್ನು ಲಿಸ್ಟ್ ಮಾಡಿರಿ)						
Serial no. ಕ್ರಮ ಸಂಖ್ಯೆ	Relationship with the respondent ಪ್ರತಿಕ್ರಿಯೆದಾರರೊಂದಿಗೆ ಸಂಬಂಧ	Age ವಯಸ್ಸು	Gender ಲಿಂಗ (male=1, female=2)	Place of residence (Here =1 /somewhere else = 2) ವಸತಿಯ ಸ್ಥಳ (ಇಲ್ಲಿ / ಬೇರೆಡೆ)	Do they earn (Y/N) ಆದಾಯ (ಹೌದು/ ಇಲ್ಲ)	Financially dependent on the respondent(Completely = 1/Partially = 2 ) ಪ್ರತಿಕ್ರಿಯೆದಾರರ ಮೇಲೆ ಆರ್ಥಿಕವಾಗಿ ಅವಲಂಬಿಸಿರುವುದು ( ಪೂರ್ಣವಾಗಿ/ ಭಾಗಶಃ )



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19. Please populate the columns below on the basis of whether you have ownership and/or access to the household assets ( Yes =1, No =2) (across both households) ಕುಟುಂಬದ ಅಸೆಟ್ಸ್ ಗೆ ಸಂಪರ್ಕ ಮತ್ತು/ ಅಥವಾ ನೀವು ಮಾಲೀಕತ್ವವನ್ನು ಹೊಂದಿರುವ ಆಧಾರದ ಮೇರೆಗೆ ಕೆಳಗಿನ ಕಾಲಂ ನಲ್ಲಿ ಬರೆಯಿರಿ.

Assets ಅಸೆಟ್ಸ್	Ownership ಮಾಲೀಕತ್ವ		Access	
	Here ಇಲ್ಲಿದೆ	Elsewhere ಇತರಡೆ	Here ಇಲ್ಲಿದೆ	Elsewhere ಇತರಡೆ
1. Electricity connection ವಿದ್ಯುತ್ ಸಂಪರ್ಕ				
2. Ceiling fan ಸೀಲಿಂಗ್ ಫ್ಯಾನ್				
3. LPG Stove ಎಲ್ ಪಿ ಜಿ ಸ್ಟವ್				
4. Two wheeler (motorcycle, scooter, Scooterette, moped) ದ್ವಿ ಚಕ್ರ (ಮೋಟಾರ್ ಸೈಕಲ್, ಸ್ಕೂಟರ್, ಸ್ಕೂಟರೆಟ್, ಮೊಪೆಡ್ )				
5. Colour TV ಕಲರ್ ಟಿವಿ				
6. Refrigerator ರೆಫ್ರಿಜರೆಟರ್				
7. Washing Machine ವಾಶಿಂಗ್ ಮೆಷಿನ್				
8. Smart phones ಪರ್ಸನಲ್ ಕಂಪ್ಯೂಟರ್				
9. Car/ Jeep/ Van ಕಾರ್ / ಜೀಪ್ /ವ್ಯಾನ್				
10. Air Conditioner ಏರ್ ಕಂಡಿಷನರ್				

11. Microwave Oven/ OTG ಮೈಕ್ರೋ ವೇವ್ ಓವನ್/ಓ ಟಿಜಿ				
12. Others eg. computers (Specify) ಇತರೆ (ಸೂಚಿಸಿ )				

**20.** Please specify the following details to determine the infrastructure type of your household  
If the current place of residence in Bengaluru is not his permanent/ only residence then populate both columns (Consider up to two), else populate only column 1 if this is his sole place of residence.

ದಯವಿಟ್ಟು ನಿಮ್ಮ ಕುಟುಂಬದ ಮೂಲ ಸೌಕರ್ಯದ ವಿಧವನ್ನು ನಿರ್ಧಾರಕ್ಕಾಗಿ ಕೆಳಗಿನ ಮಾಹಿತಿಗಳನ್ನು ಸೂಚಿಸಿರಿ .  
ಒಂದುವೇಳೆ ವಸತಿಯ ಪ್ರಸ್ತುತ ಸ್ಥಳದಲ್ಲಿ (ಸೇರಿಸುವಿಕೆ, ನಗರದ ಹೆಸರು) ಅವನ ಖಾಯಂ ಆಗದೆ ಇದ್ದಲ್ಲಿ/ ಕೇವಲ ವಸತಿ ಎರಡು ಕಾಲಂ ಗಳನ್ನೂ ತುಂಬಿರಿ. ಇಲ್ಲವಾದಲ್ಲಿ ಕೇವಲ ಅವನ ಒಂದು ವಸತಿಯ ಸ್ಥಳದಲ್ಲಿ ಕಾಲಂ 1 ನ್ನು ಮಾತ್ರ ಬರೆಯಿರಿ.

S. no	Description ವಿವರಣೆ	Current residence ಪ್ರಸ್ತುತ ವಸತಿ	Other residence ಇತರೆ ವಸತಿ
1	General type of construction material used for the dwelling ಡ್ವೆಲಿಂಗ್ ಗಾಗಿ ಉಪಯೋಗಿಸಿದ ನಿರ್ಮಾಣದ ಸಾಮಗ್ರಿಯ ಸಾಮಾನ್ಯ ವಿಧ		
2.	Material used for Outer wall ಹೊರಗಿನ ಗೋಡೆಗಾಗಿ ಉಪಯೋಗಿಸಿದ ಸಾಮಗ್ರಿ		
3.	Material used for roof ಛಾವಣಿಗಾಗಿ ಉಪಯೋಗಿಸಿದ ಸಾಮಗ್ರಿ		
4.	Household area ಮನೆಯ ಪ್ರದೇಶ		
5.	Separate rooms (do not include the room which is designated separately for kitchen, if applicable) ಪ್ರತ್ಯೇಕ ಕೋಣೆಗಳು (ಅಡುಗೆಮನೆ ಗಾಗಿ ಪ್ರತ್ಯೇಕವಾಗಿ ವಿನ್ಯಾಸ ಮಾಡಿರುವ ಕೋಣೆ ಸೇರಿಸಿ ಕೊಳ್ಳಬೇಡಿ, ಒಂದುವೇಳೆ ಅನ್ವಯವಾದಲ್ಲಿ.		
6.	Do you have any individual household toilet (Yes =1, No=2) ನೀವು ಯಾವುದೇ ವ್ಯಕ್ತಿಗತ ಕುಟುಂಬದ ಟಾಯಿಲೆಟ್ ನ್ನು ಹೊಂದಿರುವಿರಾ ?		

**21.** Please provide details on the Health profile of the respondent and his family: (Note to the surveyor: Pick up the names of dependents from question no. 18 and populate column 1. The first name should be that of the respondent's);

ಪ್ರತಿಕ್ರಿಯೆದಾರರು ಮತ್ತು ಅವರ ಕುಟುಂಬದ ಆರೋಗ್ಯದ ಪ್ರೊಫೈಲ್ : (ಸಂದರ್ಶಕರಿಗೆ ಸೂಚನೆ : ಪ್ರಶ್ನೆ 18 ರಿಂದ ಅವಲಂಬಿತರ ಹೆಸರನ್ನು ಆಯ್ಕೆ ಮಾಡಿರಿ ಮತ್ತು ಕಾಲಂ 1 ರಲ್ಲಿ ಬರೆಯಿರಿ

<p>Name ಹೆಸರು Insert Respondent's name ಪ್ರತಿಕ್ರಿಯೆದಾರರ ಹೆಸರು ಸೇರಿಸಿ.</p>	<p>Congenital disease (state, if any) ಜನ್ಮಜಾತವಾಗಿ ಕಾಯಿಲೆ ( ಯಾವುದಾದರೂ ಇದ್ದಲ್ಲಿ ಸೂಚಿಸಿ )</p>	<p>Chronic disease (State, if any) ಧೀರ್ಘಕಾಲದ ಕಾಯಿಲೆ ( ಯಾವುದಾದರೂ ಇದ್ದಲ್ಲಿ ಸೂಚಿಸಿ</p>	<p>Hospitalized in the last one year (Y=1, No=2) ಕಳೆದ ಒಂದು ವರ್ಷದಲ್ಲಿ ಆಸ್ಪತ್ರೆ (ಹೌದು =1 , ಇಲ್ಲ =2 )</p>	<p>If, yes, How many times, Else write NA ಹೌದು ಎಂದರೆ, ಎಷ್ಟು ಬಾರಿಗಳು</p>	<p>In the last 3 months, how many times did the individual fall ill ಕಳೆದ ಮೂರೂ ತಿಂಗಳಿನಲ್ಲಿ, ವ್ಯಕ್ತಿಗತವಾಗಿ ನೀವು ಎಷ್ಟು ಬಾರಿ ಅನಾರೋಗ್ಯಕ್ಕೆ ಒಳಪಡುವರು</p>	<p>How many times did they avail formal health care ಅವರು ಎಷ್ಟು ಬಾರಿ ಔಪಚಾರಿಕ ಆರೋಗ್ಯದ ಕಾಳಜಿಯನ್ನು ಪಡೆದಿದ್ದಾರೆ ?</p>	<p>Do they have a health insurance coverage (Y=1, No=2) ಅವರು ಹೆಲ್ತ್ ಇನ್ಸೂರೆನ್ಸ್ ಕವರೇಜ್ ನ್ನು ಹೊಂದಿದ್ದಾರೆಯೇ (ಹೌದು =1 , ಇಲ್ಲ = 2 )</p>	<p>If no, has the individual tried applying for a coverage and been refused so (YES =1, NO =2) ಇಲ್ಲ ಎಂದಲ್ಲಿ, ಕವರೇಜ್ ಗಾಗಿ ವ್ಯಕ್ತಿ ಅಪ್ಲೈ ಮಾಡಲು ಯಾವಾಗಲಾದರೂ ಪ್ರಯತ್ನಿಸಿದ್ದಾರೆಯೇ ಮತ್ತು ನಿರಾಕರಿಸಲಾಗಿದೆಯೇ ?</p>

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**22.** During any of your consultation, has a doctor ever attributed the reported health issue to a professional hazard? (Yes = 1, No =2) If yes I.e. 1, what was the health issue and what was recommended?  
 ನಿಮ್ಮ ಯಾವುದೇ ಕನ್ಸಲ್ಟೇಶನ್ ನ ಸಮಯದಲ್ಲಿ, ಡಾಕ್ಟರ್ ವೃತ್ತಿಪರ ಅಪಾಯವು ಆರೋಗ್ಯದ ಸಮಸ್ಯೆಯಾಗಿದೇ ವರದಿಮಾಡಿದ್ದಾರೆಯೇ ಎಂದು ತಿಳಿಸಿ ? ಹೌದು ಆರೋಗ್ಯ ಸಮಸ್ಯೆಯು ಯಾವುದು ಮತ್ತು ಯಾವುದನ್ನೂ ಶಿಫಾರಸ್ಸು ಮಾಡಲಾಗಿದೆ ?

**ECONOMIC PROFILE**

**23.** How much do you spend in a usual month on the basis of your spending pattern in the last one year?  
 ಕಳೆದ ಒಂದು ವರ್ಷದಲ್ಲಿ ನಿಮ್ಮ ವ್ಯಯ ಮಾಡುವಿಕೆಯ ಪ್ಯಾಟರ್ನ್ ನ ಆಧಾರದ ಮೇರೆಗೆ ಸಾಮಾನ್ಯ ತಿಂಗಳಿನಲ್ಲಿ ನೀವು ಎಷ್ಟು ಹಣವನ್ನು ವ್ಯಯ ಮಾಡುವಿರಿ ?

Category	Amount
Rent or Mortgage for housing ಮನೆಗಾಗಿ ಬಾಡಿಗೆ ಅಥವಾ ಮೊಟ್ಟೆಜ್	
Food that you buy (ration) ನೀವು ಖರೀದಿ ಮಾಡುವ ಆಹಾರ	
Clothes ಬಟ್ಟೆಗಳು	
Travel and transportation ಪ್ರಯಾಣ ಮತ್ತು ಸಾರಿಗೆ	
Health such as for doctor, medicine ಆರೋಗ್ಯ ಎಂದರೆ ವೈದ್ಯರು , ಮೆಡಿಸಿನ್ ಗಾಗಿ	
Home utilities such as electricity, water and cable ಮನೆ ಬಳಕೆಗಳು ಅಂದರೆ ವಿದ್ಯುತ್, ನೀರು ಮತ್ತು ಕೇಬಲ್	
Phone including cell phone ಸೆಲ್ ಫೋನ್ ಸೇರಿದಂತೆ ಫೋನ್ ಗಳು	

Alcohol, tobacco or gambling including complimentary food items ಆಲ್ಕೋಹಾಲ್ , ತಂಬಾಕು ಅಥವಾ ಪೂರಕ ಆಹಾರ ಪದಾರ್ಥಗಳು ಸೇರಿದಂತೆ ಗಂಬ್ಲಿಂಗ್	
Recreation, such as going to movies, fairs, natak, hanging out with friends ರಿಕ್ರಿಯೇಶನ್ ಅಂದರೆ ಮೂವಿಗೇ , ನಾಟಕ , ಮೇಳಗಳಿಗೆ ಹೋಗುವುದು, ಸ್ನೇಹಿತರೊಂದಿಗೆ ಹ್ಯಾಂಗ್ ಔಟ್	
Remittances (that you send home) ಹಣ ರವಾನೆಗಳು	
Cooking fuel ಅಡುಗೆ ಇಂಧನ	
Repairs and maintenance (housing) ರಿಪೇರಿಗಳು ಮತ್ತು ನಿರ್ವಹಣೆ (ಮನೆಗಳು )	
Others (Specify) ಇತರೆ (ಸೂಚಿಸಿ )	

24. What are your monthly personal savings i.e. Savings made from your own income in the past one year? (in Rs.) ನಿಮ್ಮ ತಿಂಗಳ ವೈಯಕ್ತಿಕ ಉಳಿತಾಯಗಳು ಯಾವುದು ಅಂದರೆ ನಿಮ್ಮ ಸ್ವಂತ ಆದಾಯದಿಂದ ಮಾಡಿರುವ ಉಳಿತಾಯಗಳು ?

25. Do you have any investments? Populate for all applicable types, else mark NA. Include details for you and your family members. ನೀವು ಯಾವುದೇ ಇನ್ವೆಸ್ಟ್‌ಮೆಂಟ್/ ಹೂಡಿಕೆಗಳನ್ನೂ ಹೊಂದಿರುವಿರಾ ? ಅನ್ವಯಿಸುವ ಎಲ್ಲಾ ವಿಧಗಳಿಗಾಗಿ ಬರೆಯಿರಿ .

Investment type ಹೂಡಿಕೆ ವಿಧ	Details ಮಾಹಿತಿಗಳು	Investment Amount ಮೊತ್ತ	Rate of returns (state Y if yearly, Q if quarterly and M if monthly) ಪ್ರೀಮಿಯಂ ಮೊತ್ತ	Paid for ಇದಕ್ಕಾಗಿ ಪಾವತಿಸಿರುವುದು	Paid by ಇವರಿಂದ ಪಾವತಿಸಿರುವುದು
Fixed deposits ಫಿಕ್ಸ್‌ಡ್ ಡಿಪಾಸಿಟ್					
Land or real estate ಭೂಮಿ ಅಥವಾ ರಿಯಲ್ ಎಸ್ಟೇಟ್					
Recurring deposits ಮರು ಕಳಿಸುವ ಡಿಪಾಸಿಟ್					
PPF ಪಿಪಿಎಫ್					

Bonds ಬಾಂಡ್ ಗಳು					
Post office savings ಪೋಸ್ಟ್ ಆಫೀಸ್ ಸೇವಿಂಗ್ಸ್					
Investments with informal networks (eg. chit funds, SHGs, etc.) ಅನೌಪಚಾರಿಕ ನೆಟ್ವರ್ಕ್ ಗಳೊಂದಿಗೆ ಹೂಡಿಕೆಗಳು (ಉದಾ: ಚಿಟ್ ಫಂಡ್ಸ್, ಎಸ್ ಹೆಚ್ ಜಿ, ಇತ್ಯಾದಿ.)					
Investments with MFIs ಎಮ್ ಎಫ್ ಐ ನ ಹೂಡಿಕೆಗಳು					
Bullion and ornaments ಬೆಳ್ಳಿಗಟ್ಟಿ ಮತ್ತು ಆಭರಣಗಳು.					
Others (Specify) ಇತರೆ (ಸೂಚಿಸಿ)					

26. Do you hold any of the following forms of insurance? Populate for all applicable types, else mark NA. Include details for you and your family members.

ನೀವು ಇನ್ಸೂರೆನ್ಸ್ ನ ಕೆಳಗಿನ ಯಾವುದೇ ರೂಪಗಳನ್ನೂ ಹೊಂದಿರುವಿರಾ ಎಂದು ತಿಳಿಸಿ ? ಅನ್ವಯಿಸುವ ಎಲ್ಲಕ್ಕಾಗಿ ಬರೆಯಿರಿ.

Insurance type ಇನ್ಸೂರೆನ್ಸ್ ವಿಧ	Details ಮಾಹಿತಿಗಳು	Amount ಮೊತ್ತ	Premium amount (state Y if yearly, Q if quarterly and M if monthly) ಪ್ರೀಮಿಯಂ ಮೊತ್ತ	Paid for ಇದಕ್ಕಾಗಿ ಪಾವತಿಸಿರುವುದು	Paid by ಇದರಿಂದ ಪಾವತಿಸಿರುವುದು
Life insurance ಲೈಫ್ ಇನ್ಸೂರೆನ್ಸ್					
Medical insurance ಮೆಡಿಕಲ್ ಇನ್ಸೂರೆನ್ಸ್					
Automobile insurance ಆಟೋಮೊಬೈಲ್ ಇನ್ಸೂರೆನ್ಸ್					

Accidental insurance ಅಪಘಾತ ಇನ್ಸೂರೆನ್ಸ್					
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27. Are you incurring any loans currently? Please populate the following columns accordingly on the basis of that information:

ನೀವು ಪ್ರಸ್ತುತ ಯಾವುದೇ ಲೋನ್ ಗಳನ್ನೂ ಕಟ್ಟುತ್ತಿರುವಿರಾ ? ದಯವಿಟ್ಟು ಆ ಮಾಹಿತಿಯ ಆಧಾರದ ಮೇರೆಗೆ ಕೆಳಗಿನ ಕಾಲಂ ಗಳನ್ನೂ ಕ್ರಮವಾಗಿ ಬರೆಯಿರಿ.

Type/Purpose ವಿಧ/ ಉದ್ದೇಶ	Details ಮಾಹಿತಿಗಳು	Source of borrowing ಸಾಲದ ಮೂಲ	Amount ಮೊತ್ತ	Interest amount to be paid (state Y if yearly, Q if quarterly and M if monthly) ಬಡ್ಡಿಯ ಮೊತ್ತ	Paid for ಇದಕ್ಕಾಗಿ ಪಾವತಿಸುವುದು	Paid by ಇದರಿಂದ ಪಾವತಿಸುವುದು.
MSME credit ಎಮ್ ಎಸ್ ಎಮ್ ಇ ಕ್ರೆಡಿಟ್						
Personal loan ಪರ್ಸನಲ್ ಲೋನ್						
Home loan ಹೋಂ ಲೋನ್						
Education loan ಎಜುಕೇಶನ್ ಲೋನ್						
Automobile loan ಆಟೋ ಮೊಬೈಲ್ ಲೋನ್						
Loans for conducting ceremonies eg. Marriage, death, etc. ಸೆರೆಮನಿ ನಡೆಸುವುದಕ್ಕಾಗಿ ಲೋನ್ ಉದಾ:						

ವಿವಾಹ, ಮರಣ ಇತ್ಯಾದಿ						
Credit cards ಕ್ರೆಡಿಟ್ ಕಾರ್ಡ್						
Mortgaging of assets ಅಸೆಟ್ಸ್ ನ ಮೊಟ್ಟೆಜಿಂಗ್						
Loans for contingencies ಆಕಸ್ಮಿಕಗಳಿಗಾಗಿ ಲೋನ್						
Other informal borrowings (eg. moneylenders, relatives, SHGs, etc.) ಇತರೆ ಅನೌಪಚಾರಿಕ ಸಾಲಗಳು ( ಉದಾ: ಹಣದ ಲೇವಾದೇವಿ ಮಾಡುವವರು, ಸಂಭಂದಿಕರು, ಸಣ್ಣ ಸಹಕಾರ ಸಂಘಗಳು ಇತ್ಯಾದಿ. )						
Others (specify) ಇತರೆ (ಸೂಚಿಸಿ )						

28. Do you avail any government social schemes? Please populate the following table accordingly: ಸಾಮಾಜಿಕ ಸ್ಕೀಮ್ ಗಳು



Name of Scheme ಯೋಜನೆಯ ಹೆಸರು	Accessibility ಸಂಪರ್ಕಿಸುವಿಕೆ		Perceived benefits from the scheme ಯೋಜನೆಯಿಂದ ಪಡೆದು ಕೊಂಡಿರುವ ಲಾಭಗಳು.	What benefits have you received from the scheme so far? ಇಲ್ಲಿಯವರೆಗೆ ಅಂತಹ ಯೋಜನೆಗಳಿಂದ ನೀವು ಸ್ವೀಕರಿಸುವ ಲಾಭಗಳು ಯಾವುದು ?	USER EXPERIENCES ಬಳಕೆದಾರರ ಅನುಭವಗಳು.			
	Aware but not a recipient =1 Direct recipient = 2 Indirect recipient = 3 Not aware = 4	In case of indirect recipient , who avails the scheme ಯೋಜನೆಯನ್ನು ಪಡೆಯುವವರು ಯಾರು.			From where did you hear about the scheme ಯೋಜನೆಯನ್ನು ಕುರಿತು ನೀವು ಎಲ್ಲಿಂದ ಕೇಳಿರುವಿರಿ	How did you obtain it ಇದನ್ನು ನೀವು ಹೇಗೆ ಪಡೆದಿರುವಿರಿ	What were the challenges faced in accessing the scheme ಯೋಜನೆಯನ್ನು ಸಂಪರ್ಕಿಸುವಲ್ಲಿ ಎದುರಿಸಿರುವ ಸವಾಲುಗಳು ಯಾವುದು ?	Other comments ಇತರೆ ಕಾಮೆಂಟ್ ಗಳು.
Public distribution system ಸಾರ್ವಜನಿಕ ವಿತರಣಾ ವ್ಯವಸ್ಥೆ								
Gas Bhagya scheme ಗ್ಯಾಸ್ ಭಾಗ್ಯ ಯೋಜನೆ								
NREGA ನರೆಗಾ								
Mission Housing for all ಎಲ್ಲರಿಗಾಗಿ ವಸತಿ								

ನಿರ್ಮಾಣ ಯೋಜನೆ								
Jan Dhana Yojana ಜನ್ ಧನಾ ಯೋಜನಾ								
Mukhya Mantri Santwana Harish Yojana (accident reimbursements) ಮುಖ್ಯ ಮಂತ್ರಿ ಸಾಂತ್ವನ ಹರೀಶ್ ಯೋಜನಾ ( ಅಪಘಾತ ಮರು ಪಾವತಿಗಳು )								+
Health Insurance schemes ಹೆಲ್ತ್ ಇನ್ಸುರೆನ್ಸ್ ಯೋಜನೆಗಳು								
Ujjawala scheme ಉಜ್ವಲ ಯೋಜನೆ								
Pension schemes ಪಿಂಚಣಿ ಯೋಜನೆಗಳು.								
Please mention all the other	1.							

schemes that you are availing of ದಯವಿಟ್ಟು ನೀವು ಪಡೆದಿರುವ ಎಲ್ಲಾ ಇತರೆ ಯೋಜನೆಗಳನ್ನು ಸೂಚಿಸಿರಿ.	2.							
	3.							

#### NATURE OF ENGAGEMENT

**29.** What is your nature of engagement with the auto-driving profession:  
ಆಟೋ ಡ್ರೈವಿಂಗ್ ವೃತ್ತಿಯೊಂದಿಗೆ ನಿಮ್ಮ ತೊಡಗಿಕೊಳ್ಳುವ ಸ್ವರೂಪ ಯಾವುದು ?

a. Owner and driver ಮಾಲೀಕರು ಮತ್ತು ಡ್ರೈವರ್ = 1  
b. Non-owner hired driver ಮಾಲೀಕರು ಅಲ್ಲದ ಬಾಡಿಗೆ ಡ್ರೈವರ್ = 2  
c. Not-owner but have rented in the auto ಆಟೋ ನಲ್ಲಿ ಬಾಡಿಗೆ ಹೊಂದಿರುವ ಆದರೆ ಮಾಲೀಕರು ಅಲ್ಲ = 3

In case of c. ಒಂದುವೇಳೆ ಸಿ ಆಗಿದ್ದಲ್ಲಿ.

a. From whom have you taken the auto on rent?  
ನೀವು ಯಾರಿಂದ ಆಟೋ ವನ್ನು ಬಾಡಿಗೆಗೆ ತೆಗೆದುಕೊಂಡಿರುವಿರಿ ?

b. What is the period of the contract for which the auto is taken on rent?  
ಆಟೋವನ್ನು ಬಾಡಿಗೆಗೆ ತೆಗೆದುಕೊಂಡಿರುವ ಗುತ್ತಿಗೆಯ ಸಮಯದ ಅವಧಿಯು ಯಾವುದು ?

**30.** Since when are you engaged in the profession of auto driving?  
ಸುಮಾರು ಎಷ್ಟು ಸಮಯದಿಂದ ನೀವು ಆಟೋ ಡ್ರೈವಿಂಗ್ ವೃತ್ತಿಯಲ್ಲಿ ತೊಡಗಿರುವಿರಿ ?

**31.** For how long do you plan to continue with this profession?  
ಎಷ್ಟು ಸಮಯದವರೆಗೆ ಈ ವೃತ್ತಿಯೊಂದಿಗೆ ಮುಂದುವರೆಯುವುದಕ್ಕಾಗಿ ನೀವು ಯೋಜನೆ ಹೊಂದಿರುವಿರಿ ?

<p>32. Attributes of professional engagement: ವೃತ್ತಿಪರ ತೊಡಗಿಸುವಿಕೆಯ ಲಾಭಗಳು.</p> <p>a. How many months in a year do you drive the auto? ನೀವು ವರ್ಷದಲ್ಲಿ ಎಷ್ಟು ತಿಂಗಳು ಆಟೋ ಡ್ರೈವ್ ಮಾಡುವಿರಿ ?</p> <p>b. Which part of the year do you take prolonged breaks and why? ವರ್ಷದ ಯಾವ ಭಾಗ ನೀವು ಪ್ರೋಲೋಂಗ್ ಬ್ರೇಕ್ ನ್ನು ತೆಗೆದುಕೊಳ್ಳುವಿರಿ ಮತ್ತು ಏಕೆ ?</p> <p>c. Mention the maximum period of break usually availed by you? ನಿಮ್ಮಿಂದ ಸಾಮಾನ್ಯವಾಗಿ ಪಡೆಯಲಾಗುವ ಬ್ರೇಕ್ / ಬಿಡುವಿನ ಗರಿಷ್ಠ ಸಮಯದ ಅವಧಿ ತಿಳಿಸಿ.</p> <p>d. Have there been any other contingencies for which you availed a break and what has been the nature of such contingency (report in terms of number of days taken as off and why) ನೀವು ಬಿಡುವನ್ನು ಪಡೆದಿರುವ ಯಾವುದೇ ಇತರ ಅನಿಶ್ಚಿತತೆಗಳು ಇವೆಯೇ ಮತ್ತು ಅಂತಹ ಅನಿಶ್ಚಿತತೆಯ ಸ್ವರೂಪ ಯಾವುದು ಎಂದು ತಿಳಿಸಿ ? ( ಟೇಕ್ ಆಫ್ ತೆಗೆದುಕೊಂಡಿರುವ ದಿನಗಳ ಸಂಖ್ಯೆಯನ್ನು ದಾಖಲಿಸಿ ಮತ್ತು ಏಕೆ )</p>	
<p>33. How many hours in a usual work day do you drive an auto? ದಿನದಲ್ಲಿ ಸಾಮಾನ್ಯವಾಗಿ ದಿನದಲ್ಲಿ ಎಷ್ಟು ಗಂಟೆಗಳು ನೀವು ಆಟೋ ಡ್ರೈವ್ ಮಾಡುವಿರಿ ?</p>	
<p>34. How many hours of break do you avail in a usual work day? ಸಾಮಾನ್ಯ ಕೆಲಸ ದಿನದಲ್ಲಿ ನೀವು ಎಷ್ಟು ಗಂಟೆಗಳ ಬಿಡುವನ್ನು ಪಡೆಯುವಿರಿ ?</p>	
<p>35. Are there any weekly leaves that you take? What is the nature of such leaves (report in terms of number of days taken as off and why) ನೀವು ಯಾವುದೇ ವಾರದ ರಜೆಗಳು ಇವೆಯೇ ? ಅಂತಹ ರಜೆಗಳ ಸ್ವರೂಪ ಯಾವುದು (ಟೇಕ್ ಆಫ್ ತೆಗೆದುಕೊಂಡಿರುವ ದಿನಗಳ ಸಂಖ್ಯೆಯನ್ನು ದಾಖಲಿಸಿ ಮತ್ತು ಏಕೆ )</p>	
<p>36. Are you a part of any auto union? ನೀವು ಯಾವುದೇ ಆಟೋ ಯೂನಿಯನ್ ನ ಭಾಗವಾಗಿ ಇರುವಿರಾ ?</p>	
<p>37. If yes, do you hold any position of authority in the union? ಹೌದು ಎಂದರೆ, ಯೂನಿಯನ್ ನಲ್ಲಿ ಅಧಿಕಾರಿಯ ಯಾವುದೇ ಸ್ಥಾನವನ್ನು ನೀವು ಹೊಂದಿರುವಿರಾ ?</p>	
<p>FEATURES OF AUTORICKSHAW</p>	
<p>38. How old is the auto you drive? ಆಟೋ ಗೆ ಎಷ್ಟು ವರ್ಷವಾಗಿದೆ / ವಯಸ್ಸು ?</p>	
<p>39. What is the model of the auto rickshaw you drive? ನೀವು ಡ್ರೈವ್ ಮಾಡುವ ಆಟೋ ರಿಕ್ಷಾ ನ ಮಾಡೆಲ್ ಯಾವುದು ?</p>	

<p>40. What is the type of engine of your auto rickshaw? ನಿಮ್ಮ ಆಟೋ ರಿಕ್ಶಾ ನ ಎಂಜಿನ್ ನ ವಿಧವು ಯಾವುದು?</p> <p>a. 2-stroke ಸ್ಟ್ರೋಕ್ (code as 1)</p> <p>b. 4-stroke ಸ್ಟ್ರೋಕ್ (code as 2)</p>	
<p>41. What type of fuel does your auto rickshaw run on? ನಿಮ್ಮ ಆಟೋ ರಿಕ್ಶಾ ಯಾವ ಇಂಧನ ವಿಧದಲ್ಲಿ ಚಲಿಸುವುದು ?</p> <p>a. Petrol ಪೆಟ್ರೋಲ್ (code as 1)</p> <p>b. Diesel ಡೀಸೆಲ್ (code as 2)</p> <p>c. LPG (code as 3)</p> <p>d. CNG ಸಿ ಏನ್ ಜಿನ್ (code as 4)</p> <p>e. Others, specify ಇತರೆ, ಸೂಚಿಸಿ (code as 5)</p>	
<p>42. What is the average/mileage (km/litre) of your auto rickshaw? ನಿಮ್ಮ ಆಟೋ ರಿಕ್ಶಾ ನ ಸರಾಸರಿ /ಮೈಲೇಜ್ ಯಾವುದು ?</p>	
<p>43. Do you have an emissions test certificate? What is the latest reading of your auto rickshaw on the certificate? ಪಿಯುಸಿ ಸರ್ಟಿಫಿಕೇಟ್ ಗೆ ಕ್ರಮವಾಗಿ ನಿಮ್ಮ ಆಟೋ ರಿಕ್ಶಾ ನ ಆಧುನಿಕ ರೀಡಿಂಗ್ ಯಾವುದು ?</p>	
<p>44. Does your auto have a meter? Is it in a working condition? ನಿಮ್ಮ ಆಟೋ ಮೀಟರ್ ನ್ನು ಹೊಂದಿದೆಯೇ ?</p>	
<p>45. If yes, then what is the type of meter? ಹೌದು ಎಂದರೆ, ಮೀಟರ್ ನ ವಿಧವು ಯಾವುದು ?</p>	
<p>INFORMATION ON OPERATIONS OF AUTO-RICKSHAWS</p>	
<p>46. Does your auto function as taxi-like (i.e. provide auto services to customers exclusively) or bus-like (i.e. provide auto services to groups of customers on a sharing basis) ನಿಮ್ಮ ಆಟೋ ಫಂಕ್ಷನ್ ಟ್ಯಾಕ್ಸಿ ರೀತಿಯಲ್ಲಿ ( ಗ್ರಾಹಕರಿಗೆ ವಿಶೇಷವಾಗಿ ಆಟೋ ಸರ್ವಿಸ್ ಗಳನ್ನೂ ಒದಗಿಸುವುದು ) ಅಥವಾ ಬಸ್ ರೀತಿಯಲ್ಲಿ ( ಹಂಚಿಕೆಯ ಆಧಾರದಲ್ಲಿ ಗ್ರಾಹಕರ ಗುಂಪಿಗೆ ಆಟೋ ಸರ್ವಿಸ್ ಗಳನ್ನೂ ಒದಗಿಸುವುದು ) ಹೊಂದಿದೆಯೇ ಎಂದು ತಿಳಿಸಿ ?</p> <p>a. Bus-like ಬಸ್ ರೀತಿಯಲ್ಲಿ (code as 1)</p> <p>b. Taxi-like ಟ್ಯಾಕ್ಸಿ ರೀತಿಯಲ್ಲಿ (code as 2)</p> <p>c. Both ಎರಡು (code as 3)</p>	

<p>47. If both, then how frequently do you switch between the two types of services? ಎರಡು ಇದ್ದಲ್ಲಿ, ನಂತರ ಸರ್ವಿಸ್ ನ ಎರಡು ವಿಧಗಳ ನಡುವೆ ನೀವು ಎಷ್ಟು ಸಮಯಕ್ಕೆ ಒಮ್ಮೆ ಬದಲಾಗುವಿರಿ ?</p>																					
<p>48. Information about operation ಆಪರೇಷನ್ ನ್ನು ಕುರಿತು ಮಾಹಿತಿ.</p> <p>a. What are your usual areas of operations in the city? ನಗರದಲ್ಲಿ ಆಪರೇಷನ್ ನ ನಿಮ್ಮ ಸಾಮಾನ್ಯ ಪ್ರದೇಶಗಳು ಯಾವುದು ?</p> <p>b. What are the usual hotspots of operations on your route plans? ನಿಮ್ಮ ರೂಟ್ ಪ್ಲಾನ್ ನ ಮೇಲೆ ಆಪರೇಷನ್ ನ ಸಾಮಾನ್ಯ ಹಾಟ್ ಸ್ಪಾಟ್ ಗಳು ಯಾವುದು ?</p>																					
<p>49. How much distance do you cover by auto on an average daily? ಸರಾಸರಿ ದಿನದಲ್ಲಿ ನೀವು ಆಟೋ ನಿಂದ ನೀವು ಕವರ್ ಮಾಡುವ ದೂರವು ಎಷ್ಟು ? ವಾರದ ದಿನಗಳು ಮತ್ತು ವಾರಾಂತ್ಯಕ್ಕಾಗಿ ಪ್ರತ್ಯೇಕವಾಗಿ ಸೂಚಿಸಿರಿ.</p>	<p>Weekdays ವಾರದ ದಿನಗಳು : Weekends ವಾರಾಂತ್ಯಗಳು :</p>																				
<p>50. How many rides do you take in a day on an average? ಸರಾಸರಿಯಾಗಿ ದಿನದಲ್ಲಿ ನೀವು ಎಷ್ಟು ರೈಡ್ ಗಳನ್ನೂ ತೆಗೆದುಕೊಳ್ಳುವಿರಿ ?</p>																					
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51. On an average how many passengers travel per trip? ಪ್ರತಿ ಟ್ರಿಪ್ ಗೆ ಸರಾಸರಿಯಾಗಿ ಎಷ್ಟು ಪ್ರಯಾಣಿಕರು ಪ್ರಯಾಣ ಮಾಡುವರು ?				
52. Are the number of rides particularly high at a specific point in the day? When? ವಾರದ ನಿರ್ದಿಷ್ಟ ದಿನಗಳ ಸಮಯದಲ್ಲಿ ರೈಡ್ ಗಳಲ್ಲಿ ಸಂಖ್ಯೆಯಲ್ಲಿ ನಿರ್ದಿಷ್ಟ ಹೆಚ್ಚು ಇರುವುದೇ ? ಯಾವಾಗ ?				
53. Are the number of rides particularly low at a specific point in the day? When? ದಿನದಲ್ಲಿ ನಿರ್ದಿಷ್ಟ ಪಾಯಿಂಟ್ ನಲ್ಲಿ ರೈಡ್ ಗಳ ಸಂಖ್ಯೆಯಲ್ಲಿ ನಿರ್ದಿಷ್ಟವಾಗಿ ಕಡಿಮೆ ಇರುವುದೇ ? ಯಾವಾಗ ?				
54. Are the number of rides particularly high during specific days of the week? When? ವಾರದ ನಿರ್ದಿಷ್ಟ ದಿನಗಳ ಸಮಯದಲ್ಲಿ ರೈಡ್ ಗಳಲ್ಲಿ ಸಂಖ್ಯೆಯಲ್ಲಿ ನಿರ್ದಿಷ್ಟ ಹೆಚ್ಚು ಇರುವುದೇ ? ಯಾವಾಗ ?				
55. Are the number of rides particularly low during specific days of the week? When? ವಾರದ ನಿರ್ದಿಷ್ಟ ದಿನಗಳಲ್ಲಿ ನಿರ್ದಿಷ್ಟ ರೈಡ್ ಗಳ ಸಂಖ್ಯೆಯು ಕಡಿಮೆಯಾಗಿ ಇರುವುದೇ ? ಯಾವಾಗ ?				
56. How much time on an average do you spend waiting for customers daily? ಗ್ರಾಹಕರಿಗಾಗಿ ಕಾಯುವಲ್ಲಿ ನೀವು ಸರಾಸರಿಯಾಗಿ ಎಷ್ಟು ಸಮಯವನ್ನು ವ್ಯಯ ಮಾಡುವಿರಿ ?				
57. On a usual day how many kilo meters do you usually run without a passenger? ಸಾಮಾನ್ಯ ದಿನದಲ್ಲಿ ಪ್ರಯಾಣಿಕರು ಇಲ್ಲದೆ ನೀವು ಸಾಮಾನ್ಯವಾಗಿ ಎಷ್ಟು ಕಿಲೋ ಮೀಟರ್ ಗಳು ಚಲಿಸುವಿರಿ ?				
58. On an average how much time do you lose in traffic jams on a usual day? ಸರಾಸರಿಯಾಗಿ, ಸಾಮಾನ್ಯ ದಿನದಲ್ಲಿ ಟ್ರಾಫಿಕ್ ಜಾಮ್ ಗಳಲ್ಲಿ ನೀವು ಎಷ್ಟು ಸಮಯವನ್ನು ಕಳೆದು ಕೊಳ್ಳುವಿರಿ ?				
59. Have you registered yourself on these new tech-based apps such as Ola and Uber? ನೀವು ಓಲಾ ಮತ್ತು ಯುಬರ್ ರೀತಿಯ ಈ ಹೊಸ ಟೆಕ್ -ಆಧಾರಿತ ಆಪ್ ಗಳಿಗೆ ನಿಮ್ಮನ್ನು ನೋಂದಣಿ ಮಾಡಿಕೊಂಡಿರುವಿರಾ ? ( Yes = 1, No =2)				
60. If yes, how has it affected your business? Can you point out the change in the number of rides, earnings and customers?				

ಹೌದು ಎಂದರೆ, ನಿಮ್ಮ ಬುಸಿನೆಸ್ ಮೇಲೆ ಇದು ಹೇಗೆ ಪರಿಣಾಮ ಬೀರುವುದು ? ರೈಡ್ ಗಳು, ಗಳಿಕೆ ಮತ್ತು ಗ್ರಾಹಕರ ಸಂಖ್ಯೆಯಲ್ಲಿ ಬದಲಾವಣೆಯನ್ನು ಪಾಯಿಂಟ್ ಔಟ್ ಮಾಡಿರಿ.				
61. Do you use a GPS? ನೀವು ಜಿಪಿಎಸ್ ನ್ನು ಉಪಯೋಗಿಸುವಿರಾ ? a. Yes, always ಹೌದು. ಯಾವಾಗಲೂ (code as 1) b. Never ಯಾವತ್ತು ಇಲ್ಲ (code as 2) c. Sometimes ಕೆಲವೊಮ್ಮೆ (code as 3)				
62. If answer is b. or c., specify why? ಕೆಲವೊಂದು ಬಾರಿ ಆಗಿದ್ದಲ್ಲಿ, ಏಕೆ ಎಂದು ಸೂಚಿಸಿ ?				
INFORMATION RELATED TO COSTS				
63. If response to q 29 i.e. type of engagement is owner/driver i.e. 1, then ಮಾಲೀಕರು / ಡ್ರೈವರ್ ಗೆ ತೊಡಗಿ ಕೊಳ್ಳುವ ವಿಧವು ಆಗಿದ್ದಲ್ಲಿ ನಂತರ ಪ್ರತಿಕ್ರಿಯೆ ನೀಡಿರಿ : a. What was the purchase price of the auto? ಆಟೋ ನ ಖರೀದಿಯ ಬೆಲೆಯೂ ಯಾವುದು ? b. Was it brought on credit? (Yes = 1, No = 2) ಸಾಲದ ಮೇಲೆ ಇದನ್ನು ಖರೀದಿ ಮಾಡಲಾಗಿದೆಯೇ ? c. If yes, specify the source of credit ಹೌದು ಎಂದರೆ, ಕ್ರೆಡಿಟ್/ ಸಾಲದ ಮೂಲವನ್ನು ಸೂಚಿಸಿ				
64. What would you estimate as the current market price of this auto? ಈ ಆಟೋ ನ ಪ್ರಸ್ತುತ ಮಾರುಕಟ್ಟೆ ಬೆಲೆಯಾಗಿ ನೀವು ಅಂದಾಜು ಮಾಡಿರುವುದು ಯಾವುದು ?				
65. What are your costs incurred on the following: ಕೆಳಗಿನವುಗಳ ಮೇಲೆ ಬರುವ ನಿಮ್ಮ ವೆಚ್ಚಗಳು ಯಾವುದು?				
CATEGORY ಕ್ಯಾಟಗರಿ	Institutional ಸಂಸ್ಥಾ	Informal ಅನೌಪಚಾರಿಕ	Frequency (one-time, monthly, quarterly, yearly, etc.) ಫ್ರೀಕ್ವೆನ್ಸಿ	Payment mode ಪಾವತಿಯ ವಿಧಾನ (who is paying for it)
Down payment ಡೌನ್ ಪೇಮೆಂಟ್				
Rent paid to the owner if the auto is on lease ಒಂದುವೇಳೆ ಆಟೋ ಲೀಸ್ ಇದ್ದಲ್ಲಿ ಮಾಲೀಕರಿಗೆ				



ಬಾಡಿಗೆ ಪಾವತಿಸುವುದು				
Penalty for non-payment of rent ಬಾಡಿಗೆ ಪಾವತಿ ಮಾಡದೇ ಇರುವುದಕ್ಕೆ ಪೆನಾಲ್ಟಿ				
Registration ನೋಂದಣಿ				
PUC ಪಿಯುಸಿ				
Driving license ಡ್ರೈವಿಂಗ್ ಲೈಸೆನ್ಸ್				
Registration with the union ಯೂನಿಯನ್ ನೊಂದಿಗೆ ನೋಂದಣಿ				
Commission paid to trade association for benefits ಟ್ರೇಡ್ ಅಸೋಸಿಯೇಶನ್ ಗೆ ಪಾವತಿಸುವ ಕಮಿಷನ್				
Fines ಫೈನ್ಸ್ /ದಂಡಗಳು				
Others ಇತರೆ				

66. What are the costs incurred on the following operational heads per month?

ಕೆಳಗಿನ ಅಪರೇಶನಲ್ ಹೆಡ್ಸ್ ನ ಮೇಲೆ ಬರುವ ವೆಚ್ಚಗಳು ಯಾವುದು ?

- Fuel expenditure ಇಂಧನ ವೆಚ್ಚಗಳು
- Gas (Tyre air) ಗ್ಯಾಸ್
- Minor repair works ಸಣ್ಣ ರಿಪೇರ್ ಕೆಲಸಗಳು Major repair works ದೊಡ್ಡ ರಿಪೇರ್ ಕೆಲಸಗಳು
- Accidents ಅಪಘಾತಗಳು
- Maintenance ನಿರ್ವಹಣೆ
- Bribes ಲಂಚಗಳು
- Fines ದಂಡಗಳು. / ಫೈನ್ಸ್

INFORMATION RELATED TO INCOME

67. How much do you collect daily by driving the auto usually? ಸಾಮಾನ್ಯವಾಗಿ ಆಟೋ ಡ್ರೈವಿಂಗ್ ಮಾಡುವುದರಿಂದ ದಿನನಿತ್ಯ ಎಷ್ಟು ಸಂಗ್ರಹಿಸುವಿರಿ ?				
68. How much income do you receive in a single trip? ಸಿಂಗಲ್ ಟ್ರಿಪ್ ನಲ್ಲಿ ನೀವು ಎಷ್ಟು ಆದಾಯವನ್ನು ಸ್ವೀಕರಿಸುವಿರಿ ?				
Trip type ಟ್ರಿಪ್ ವಿಧ	Average ಸರಾಸರಿ	Lean ಕಡಿಮೆ	Peak ಪೀಕ್	Night ರಾತ್ರಿ
Short ಸಣ್ಣ (<5)				
Medium ಮಧ್ಯಮ (5-15)				
Long trip ಉದ್ದವಾದ ಟ್ರಿಪ್ (>15)				
69. How much do you collect daily by driving the auto usually during a peak season? ಪೀಕ್ / ಜನಸಂದಣಿ ಇರುವ ಋತುಮಾನದ ಸಮಯದಲ್ಲಿ ಸಾಮಾನ್ಯವಾಗಿ ಆಟೋ ಡ್ರೈವಿಂಗ್ ಮಾಡುವುದರಿಂದ ನೀವು ನಿತ್ಯ ಎಷ್ಟು ಸಂಗ್ರಹಿಸುವಿರಿ				
70. How much do you earn if you are employed as a driver? (daily = D/weekly = W /monthly = M) ಡ್ರೈವರ್ ಆಗಿ ನೀವು ನೌಕರರು ಆಗಿದ್ದಲ್ಲಿ, ನೀವು ಎಷ್ಟು ಗಳಿಕೆ ಮಾಡುವಿರಿ (ದಿನನಿತ್ಯ/ ವಾರಕ್ಕೆ/ ತಿಂಗಳಿಗೆ)?				
71. Are there any advertisements on your auto currently? ನಿಮ್ಮ ಆಟೋ ವನ್ನು ಪ್ರಸ್ತುತ ಯಾವುದೇ ಬ್ರಾಂಡಿಂಗ್ ನ್ನು ಹೊಂದಿರುವಿರಾ ? a. What is your earning from the same? ಅದರಿಂದ ನಿಮ್ಮ ಗಳಿಕೆಯು ಯಾವುದು ? b. Is there any commission paid by you? ನಿಮ್ಮ ಯಾವುದೇ ಕಮಿಷನ್ ನ್ನು ಪಾವತಿ ಮಾಡಲಾಗುವುದೇ ? c. If there is any commission received by you, in case it is a rented/hired driver? ಒಂದುವೇಳೆ ಇದನ್ನು ಬಾಡಿಗೆ ಬಿಟ್ಟಲ್ಲಿ/ ಡ್ರೈವರ್ ನ್ನು ಬಾಡಿಗೆ ನೀಡಿದರೆ, ನಿಮ್ಮಿಂದ ಯಾವುದೇ ಕಮಿಷನ್ ನ್ನು ಸ್ವೀಕರಿಸಲಾಗುವುದೇ ? d. If yes, what percentage? ಹೌದು ಎಂದರೆ, ಶೇಕಡಾ ಯಾವುದು ? For how long have you got a branding done? ಎಷ್ಟು ಸಮಯಕ್ಕಾಗಿ ನೀವು ಮಾಡಲಾಗಿರುವ ಬ್ರಾಂಡಿಂಗ್ ನ್ನು ಪಡೆದಿರುವಿರಿ ? e. How was this process initiated? ಈ ಪ್ರಕ್ರಿಯೆಯನ್ನು ಹೇಗೆ ಮುಂದಾಳತ್ವ ಮಾಡಲಾಗಿದೆಯೇ ಎಂದು		-		

<p>ತಿಳಿಸಿ ? (Approached by the company ಕಂಪನಿಯಿಂದ ಅಪ್ರೋಚ್ ಮಾಡಿರುವುದು, Initiated by the driver ಡ್ರೈವರ್ ನಿಂದ ಮುಂದಾಳತ್ವ, Initiated by the owner ಮಾಲೀಕರಿಂದ ಮುಂದಾಳತ್ವ, Initiated by a middle man ಮಧ್ಯ ವ್ಯಕ್ತಿಯಿಂದ ಮುಂದಾಳತ್ವ )</p>	
<p><b>72.</b> Can you identify any specific reason which has resulted in a change in your income in the following ways in the last 2 years?  ಕಳೆದ ಎರಡು ವರ್ಷದಲ್ಲಿ ಕೆಳಗಿನ ರೀತಿಯಲ್ಲಿ ನಿಮ್ಮ ಆದಾಯದಲ್ಲಿ ಬದಲಾವಣೆಯಲ್ಲಿ ಫಲಿತಾಂಶವನ್ನು ಹೊಂದಿರುವ ಯಾವುದೇ ನಿರ್ದಿಷ್ಟ ಕಾರಣವನ್ನು ಗುರುತಿಸಿರುವಿರಾ ?</p> <p>a. Increase in income ಆದಾಯದಲ್ಲಿ ಏರಿಕೆ  b. Decrease in income ಆದಾಯದಲ್ಲಿ ಇಳಿಕೆ  c. No change in income</p>	
<p><b>INFORMATION ABOUT COMPETITION</b></p>	
<p><b>73.</b> Do you see any decline in your income due to the following set of competitors (tick all applicable options)  ಸ್ಪರ್ಧಾರ್ಥಿಗಳ ಕೆಳಗಿನ ಸೆಟ್ ನ ಕಾರಣದಿಂದಾಗಿ ನಿಮ್ಮ ಆದಾಯದಲ್ಲಿ ಯಾವುದೇ ಇಳಿತವನ್ನು ನೀವು ನೋಡಿರುವಿರಾ ? ( ಅನ್ವಯಿಸುವ ಎಲ್ಲ ಆಯ್ಕೆ ಗಳನ್ನೂ ಹೊಂದಿರಿ )</p> <p>a. Other modes of public transport  ಕಮರ್ಷಿಯಲ್ ವಾಹನಗಳು ( ಕಾರ್ಪೋರೇಟ್ ಕ್ಯಾಟಗರಿ ಯನ್ನು ಸೇರಿಸಿಕೊಳ್ಳುವುದಿಲ್ಲ )  b. App-based autos i.e Ola autos  ಅದೇ ರೀತಿಯ ಕಮರ್ಷಿಯಲ್ ವಾಹನಗಳು (ಆಪ್ ಆಧಾರಿತ )  c. App-based taxis i.e. Ola/uber cabs  ಕಮರ್ಷಿಯಲ್ ಸಾರಿಗೆಯ ಭಿನ್ನವಾದ ಮೋಡ್ ಗಳು (ಯಾವ್ ಆಧಾರಿತ )  d. Not applicable ಅನ್ವಯಿಸುವುದಿಲ್ಲ.</p>	
<p><b>74.</b> What are the various measures you have adopted to negotiate with this competition? ( tick all applicable options)  ಈ ಸ್ಪರ್ಧಾರ್ಥಿಯೊಂದಿಗೆ ಸಾಧಿಸುವುದಕ್ಕಾಗಿ ನೀವು ಅಳವಡಿಸಿರುವ ವಿವಿಧ ಅಳತೆ ಮಾನಗಳು ಯಾವುದು ಎಂದು ತಿಳಿಸಿ ?</p> <p>a. Change route plans ರೂಟ್ ಪ್ಲಾನ್ ನ್ನು ಬದಲಾಯಿಸುವುದು  b. Increase per trip fare ಪ್ರತಿ ಟ್ರಿಪ್ ಶುಲ್ಕವನ್ನು ಹೆಚ್ಚು ಮಾಡುವುದು  c. Increase working hours ಕೆಲಸ ಮಾಡುವ ಗಂಟೆಗಳನ್ನು ಹೆಚ್ಚಿಸುವುದು  d. Shift working hours ಕೆಲಸ ಮಾಡುವ ಗಂಟೆಗಳನ್ನು ಬದಲಿಸುವುದು  e. Decrease per trip fare ಪ್ರತಿ ಟ್ರಿಪ್ ದರ ಕಡಿಮೆ ಮಾಡುವುದು  f. Passenger pooling (sharing) ಪ್ರಯಾಣಿಕರ ಪೂಲಿಂಗ್  g. Others (specify) ಇತರೆ ( ಸೂಚಿಸಿ )</p>	
<p><b>INFORMATION ON CUSTOMER ENGAGEMENT</b></p>	

75. How do you usually negotiate the fare (tick all applicable)? ಸಾಮಾನ್ಯವಾಗಿ ಶುಲ್ಕವನ್ನು ಹೇಗೆ ಸಾಧಿಸುವಿರಿ? (ಅನ್ವಯಿಸುವ ಎಲ್ಲವನ್ನು ಟಿಕ್ ಮಾಡಿರಿ )

- Set by meter (Standard meter) ಮೀಟರ್ ನಿಂದ ಸೆಟ್ ಮಾಡುವುದು
- Set by app-based fare calculator ಆಪ್ ಆಧಾರಿತ ಶುಲ್ಕ ಕ್ಯಾಲ್ಕುಲೇಟರ್ ನಿಂದ ಸೆಟ್ ಮಾಡುವುದು
- Make a quote based on the route/distance ರೂಟ್ / ದೂರದ ಆಧಾರದ ಮೇಲೆ ಕೊಟ್ ಮಾಡುವುದು
- Bargain with the passenger ಪ್ರಯಾಣಿಕರೊಂದಿಗೆ ಚೌಕಾಶಿ
- Distance-based fare defined by the auto union ಆಟೋ ಯೂನಿಯನ್ ನಿಂದ ನಿರ್ಧಾರ ಮಾಡಿರುವ ದೂರ ಆಧಾರಿತ ಶುಲ್ಕ

76. On what grounds do you usually deny services to your customers?

ನಿಮ್ಮ ಗ್ರಾಹಕರಿಗೆ ಯಾವ ಆಧಾರದ ಮೇಲೆ ಸಾಮಾನ್ಯವಾಗಿ ಸರ್ವಿಸ್ ಗಳನ್ನೂ ಅಲ್ಲಗಳೆಯುವಿರಿ / ನಿರಾಕರಿಸುವಿರಿ ?

77. How many times do you face difficulty in obtaining payment from a passenger after having completed a ride (report as applicable, in terms of days = D, weeks = W, months = M) ರೈಡ್ ಪೂರ್ಣ ಗೊಂಡಿರುವ ನಂತರ ಪ್ರಯಾಣಿಕರಿಂದ ಪೇಮೆಂಟ್ ನ್ನು ಪಡೆಯುವಲ್ಲಿ ನೀವು ಎಷ್ಟು ಬಾರಿ ಕಷ್ಟವನ್ನು ಎದುರಿಸಿರುವಿರಿ ? (ಅನ್ವಯಿಸುವಂತೆ ವರದಿ ಮಾಡಿರಿ, ದಿನಗಳು, ವಾರಗಳು, ತಿಂಗಳುಗಳಲ್ಲಿ )

INFORMATION FROM APP-BASED AUTO SERVICE PROVIDERS (to be asked only to autos registered on OLA)

78. What is the perceived benefit/ disadvantage of being rated by passengers according to you

ನಿಮ್ಮ ಪ್ರಕಾರ ಪ್ರಯಾಣಿಕರಿಂದ ರೇಟ್ ಮಾಡಲಾಗಿರುವ ಗ್ರಹಿಸಿರುವ ಲಾಭ/ ಅನಾನುಕೂಲತೆಗಳು ಯಾವುದು ಎಂದು ತಿಳಿಸಿ ?

- In terms of income ಅದಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ.
- In terms of frequency of bookings received ಸ್ವೀಕರಿಸಿದ ಬುಕಿಂಗ್ಸ್ ನ ಫ್ರೀಕ್ವೆನ್ಸಿ ಗೆ ಸಂಬಂಧಿಸಿದಂತೆ
- In terms of perks provided by the company ಕಂಪನಿಯಿಂದ ಒದಗಿಸಿರುವ ಪೆರ್ಕ್ಸ್ ಗೆ ಸಂಬಂಧಿಸಿದಂತೆ

## FOCUSED GROUP DISCUSSION GUIDE

Hello

My name is \_\_\_\_\_ and I am from a research organization named Outline India in Gurgaon. We are here to conduct a study on auto rickshaw drivers as part of the urban transport system in your city Bengaluru. Hence, we would like to ask your group a couple of questions. This exercise will not take more than 45 minutes. This is an open discussion and there are no right or wrong answers. Please feel free to speak your mind and we promise that the findings of this study shall not be disclosed to anyone beyond the purpose of the research.

### CONSENT FORM

I, \_\_\_\_\_, hereby grant permission to be a part of the Baseline Survey for the study of urban transport system conducted by Outline India for ACRA.

Respondent signature

Surveyor's signature

### Section 1: Warm up

Please introduce yourselves and tell us where you reside within the city?

(Instruction to the note-taker: Note down name, age, gender (observational), religion, caste name and group in a separate sheet.)

1. For how long have you been in this city? Can you narrate some of your experiences while driving an auto in this city through stories/anecdotes?
2. What do you like and dislike about the city? How has your imagination about this city changed after you have started driving an auto for a livelihood?
3. Briefly tell us how you got introduced into this profession? How does one generally get introduced into the auto driving profession in this city? How do they get the required training? *(Is it through networks? What are the other channels?)*

*Probe: Imagine today a newcomer wants to join your profession? How should he go about it? What should he do first? What else...? What challenges would he face? Say, for instance, in buying your own auto, getting licences and permits, registering with a union, selecting a route to ply, negotiating with traffic authorities and PUC. What could be the possible ways of negotiating with such challenges? In terms of getting access to credit and loans?*

*What if it is a woman who wants to get introduced into this profession? What will be her challenges? How can she cope with it?*

### Section 2: Socio-demographic mapping of the trade

Dialogue: How many of you have come into this city to make a living?

Question for only migrants:

1. Do you also have a house elsewhere which can either be your hometown or you migrate elsewhere for some other livelihood engagement that you be engaging in?

*Probes: Where does your family live? Have you migrated to any other place before or after moving into this city? If they have migrated from another place, ask when was the first time you came to this city and started living here? With whom did*

you come and at what age? Why did you start living here also ask, why this particular site was chosen as a place of residence?

Question for all respondents:

2. How do you see a migrant versus a non-migrant entering the trade? Is there a difference? If yes, account for the same.
3. Do you perceive a change in the number of people driving autos in the city? Can you identify since when this change became significant?  
*(If there have been new entrants what is their profile?)*
4. How has the change impacted the profession?

### Section 3: Operations

1. What sort of benefits have you been able to access in the course of your engagement with this profession? *(In terms of consistent livelihood as well as non-monetary benefits)*
2. Let us now engage in a small exercise. Here is a map of the city. Please tell us which are your usual areas of operation? Now please refer to the routes and tell us what specific kinds of inconveniences and conveniences you face while driving on these routes, keeping the diurnal and seasonal variation in mind.

*Such as (Do not introduce the following probes if the respondent has already mentioned these issues by themselves):*

- *Peak time traffic/ heavy traffic in general*
- *Competition/Number of Customers*
- *Fare negotiations*
- *Customer behaviour*
- *Possibilities of being caught for violations*
- *Forced payments*
- *Wait-time and parking*
- *Accidents*
- *Security*
- *Factional rivalries*
- *Access to other facilities such as food, water, toilets etc.*

3. What are the strategies that you use to cope with such potential inconveniences that you seem to face while operating in these routes?
4. How effective are these strategies, what are the adversities faced by you in implementing these potential strategies?
5. Do you think your affiliation with the union helps you negotiate with any of these problems? If yes, how?
6. Are there any problems associated with the profession as a whole that you have not accounted for above?

*Such as (Do not introduce the following probes if the respondent has already mentioned these issues by themselves):*

*Renewal of licences and associated negotiations with government officials*

*Health hazards (Lung diseases, etc.)*

*Old- age related problems*

*Absence of employment benefits*

*Financial instability*

7. What are the strategies that you use to cope with such potential inconveniences?

*(Note to the moderator: Introduce the relevance of governmental social security schemes if not already discussed)*

8. Do you think your affiliation with the union help you negotiate with any of these problems? If yes, how?
9. Do you think affiliation with unions have some disadvantages as well?

### Section 5: Pollution

1. Do you think auto rickshaws have an impact on the city's pollution levels? Account for the difference by 2 stroke and 4 stroke if you perceive any?
2. How frequently do you have to get pollution clearances? What are the difficulties faced by you in the process?

3. What are your opinions about changing to four stroke engines and CNG? *(Ask about difficulties that may be involved if not already answered)*
4. Do you think you can personally benefit from such changes?

#### **Section 6: Viability**

1. Can you suggest some of the ways in which the profession could be made more viable?
2. How do you think professional training can benefit you? What kind of training do you think could be useful?
3. In what ways do you think you can improve your bargaining power?
4. What effect has the introduction of Ola/ Uber corporate bodies in the area of transport have on your trade?  
*(Probe to be given out only if this has not been told already: has it increased competition? How are you coping with such competition at present? How else do you think you can cope better with such competition?)*
5. How useful do you think having trade related insurances in increasing the viability to operate within sector?
6. Do you have any sort of branding on your autos? If yes, how do you access the same? What is the procedure you have to follow in order to have your auto branded?

#### **Section 7: Desirability of an intervention**

1. How do you think an outside intervention can help you?
2. What could be the possible scope of such an intervention? What should be some of the immediate and extended concerns?
3. To what extent are you ready to work with an outside organization to increase your viability? What are some of the issues that you might be doubtful about?

Thank the respondent for his time.

## KEY INFORMANT INTERVIEW TOOL

### Profile of the respondent

1. Name of the respondent
2. Designation
3. Department

### SECTION 1: GENERAL

1. Comment on the general issues pertaining to the road transport situation in Bangalore.
2. Can you tell us about the issues pertaining to the operation of the autorickshaws? Report on both problems and convenience with respect to operations.
3. What is being done/measures taken to ensure effective operations and management of autorickshaws in Bangalore city? Can you mention some of challenges being faced?
4. In the context of the debate on sustainable energy solutions, what are your opinions on the way such solutions can be implemented in Bangalore in the context of transportation in general and of autorickshaws in particular?
5. Are there any such interventions already in place that you are aware of? (Ask for both government and private)? How effective do you think these solutions/interventions are in the context of autorickshaws in Bangalore? Can mention both the strengths and the weaknesses of the specific interventions that you mentioned? What are some of the possible ways in which these weaknesses can be overcome?
6. Given the lacunae/limitations in the existing interventions, are there any recommendations/alternate strategies that you would like to suggest for an upcoming intervention? What are the considerations that need to be taken into account for any such relevant interventions?
7. What would you suggest to promote better cooperation with auto drivers in maintaining environmental standards? What measures would you suggest to improve surveillance mechanisms? Do you think there are adequate infrastructure to support a complete switch to alternate fuel? How would you ensure a long term economy if there is a complete switch to CNG?
8. There is a perceptions that a number of environmental hazards caused by autos can be averted by raising awareness of and generating dialogues with auto drivers on the usage of clean technology. Do you agree or disagree? State your reasons for the same?

### SECTION 2: Technical

#### 2.1 Section for PUC official

1. Can you elaborate the methods through which pollution control mechanisms play out in the city of Bangalore? Are there any variations in strategy within the city and specifically in the case of autorickshaws?



2. Can you give us a sense of the charges for obtaining a PUC certificate for autorickshaws? How is this determined?
3. Explain some of the conditions under which PUC is denied to autorickshaws that you are aware of? How frequent are such cases of non-compliance with the current standards? State some of the reported problems for an auto rickshaw in obtaining a PUC clearance in case there are grievance redressal mechanisms in place? (If not mentioned then ask, what are the emission standards currently prevalent in the city in case of autorickshaws?)
4. Has there been any organised resistance say for instance by auto unions in negotiating with environmental compliances, for eg, flexibility in defined standards?
5. What are your views about four stroke engines and their efficacy in cutting down pollution? What are the particular advantages of four stroke engines? How cost effective are they? What is the mechanism for dealing with NOx emissions from 4 stroke engines? What in your view can be done to make four stroke engines more sustainable?

#### Section for Traffic control and RTO

1. Given the current traffic situation in Bangalore, what are the general measures undertaken by the traffic control department to manage and control the traffic control in Bangalore? What about peak hours and at night?
2. What are issues generally faced in road traffic management with respect to autorickshaws? Do you face any difficulties in tackling and negotiating with auto unions? If yes, what sort?
3. What sort of complaints do you generally receive against auto drivers?
4. Could suggest any remediation initiatives that can be undertaken to sensitize auto drivers in a. adhering to road safety protocols b. improving customer interaction (attitude towards customers in general and women and negotiating fares)
5. What are the additional hikes in auto fares that can be expected if clean technology was to completely implemented? How do you plan to negotiate with the different stakeholders
6. What are the measures undertaken by the road transport department specifically to aid autorickshaw drivers?
7. Is there a way to have a better customer-auto coordination while hiring an auto given the current traffic situation in Bangalore? What you think is a most optimal combination of car-like or bus-like operations for smooth traffic management?

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