

**UNIVERSITY GRANTS COMMISSION  
BAHADUR SHAH ZAFAR MARG  
NEW DELHI – 110 002**

**PROFORMA FOR SUBMISSION OF INFORMATION AT THE TIME OF SENDING THE  
FINAL REPORT OF THE WORK DONE ON THE PROJECT**

1. Title of the Project ‘**Livelihood Patterns and Hazard Vulnerability of the Informal Coal Carriers on Bicycles from Ramgarh Coal Region to the City of Ranchi in Jharkhand.**’

2. NAME AND ADDRESS OF THE PRINCIPAL INVESTIGATOR: **Dr. Abhay Krishna Singh**

3. NAME AND ADDRESS OF THE INSTITUTION: **University Department of Geography,  
DSPM University, Ranchi ( Jharkhand)**

4. UGC APPROVAL LETTER NO. AND DATE **F.43-355/2014 (SR), 11/09/2015**

5. DATE OF IMPLEMENTATION **14/07/2016**

6. TENURE OF THE PROJECT **03 Years**

7. TOTAL GRANT ALLOCATED **Rs. 949400.00/-**

8. TOTAL GRANT RECEIVED **Rs. 880800.00/-**

9. FINAL EXPENDITURE **Rs. 892972.48/-**

10. TITLE OF THE PROJECT ‘**Livelihood Patterns and Hazard Vulnerability of the Informal Coal Carriers on Bicycles from Ramgarh Coal Region to the City of Ranchi in Jharkhand**’

11. OBJECTIVES OF THE PROJECT: **A Separate Sheet Attached herewith**

12. WHETHER OBJECTIVES WERE ACHIEVED **Yes (GIVE DETAILS)**

13. ACHIEVEMENTS FROM THE PROJECT: **Separate Sheet Attached**

14. SUMMARY OF THE FINDINGS **A separate Sheet Attached (IN 500 WORDS)**

15. CONTRIBUTION TO THE SOCIETY **Separate Sheets Attached herewith (GIVE DETAILS)**

16. WHETHER ANY PH.D. ENROLLED/PRODUCED OUT OF THE PROJECT **NO**

17. NO. OF PUBLICATIONS OUT OF THE PROJECT: **one Published one in Press(PLEASE ATTACH)**

(PRINCIPAL INVESTIGATOR)

(REGISTRAR/PRINCIPAL)  
(Seal)

(CO-INVESTIGATOR)

11. The objective of the study is to investigate the following Research Questions. The Research Questions are largely focused on the coal carriers (on the bicycle) from Ramgarh Coal Region to the City of Ranchi.

### **Objective 1**

To understand the livelihood pattern of informal coal carriers. they are in this trade/practice voluntarily or are forced into it.

### **Research Question 1**

1. What are the livelihood opportunities available to these informal coal carriers?

### **Objective 2**

To assess the total contribution of income of these informal bicycle coal carriers in the Regional Economy.

### **Research Question 2**

2. Contribution of these Coal Carriers in the Regional Economy?

### **Objective 3**

To determine the social acceptability of bicycle informal coal carriers in terms of 'inclusion or exclusion' in the mainstream of society. Does society consider them as part and parcel of the social setup or they are taken as only a mechanical tool/ medium of bringing cheaper coal to their doorsteps, who cease to exist psychologically after delivering their loads?

### **Research Questions 3**

3. Social acceptability of the informal coal carriers the 'inclusion or exclusion' of these people in the society

### **Objective 4**

Since livelihood includes the income as well as the expenditure of the households as well as the individuals, it is important to keep an account of expenditures incurred under the head of 'medical care or treatment' to have a better understanding of the livelihood pattern. Care has been taken to incorporate the 'reported' cases instead of 'recorded' ones in the primary health centres or the government hospitals.

### **Research Question 4**

4. How many times they fell ill during the reference period of last one year and how much expenditure they incurred on medicine in particular and on treatment in general

## **Objective 5**

The whole process of procuring the raw coal and burning (igniting) it in the shallow depressions (Khudi) and covering it with slack (coal dust) when considered hot enough to remove volatiles from the heap of coal and turning it into crude coke, loaded in small gunny bags and taken to by pushing the cycles to the city of Ranchi covering a distance of more than 50 km, involves a tremendous amount of risk. The magnitude of the risk (all kind) and the coping mechanism needs to be looked into separately.

## **Research Question 5**

5. What kind of environment as well as health hazards they are exposed to? What kind of mechanism they have developed to cope with such impending hazards?

12. The objectives laid down at the commencement of the study were largely achieved. The objective of the ‘Social Acceptability’ was difficult to assess for many reasons. the subjective nature of the objective was hard to quantify and the responses were largely concocted by the respondents.

The human tendency to present oneself as good and upholder of basic human qualities including the mutual and respectful co-existence were largely played on the minds of the respondents when confronted with questions related to social acceptability. The two community, one the cycle coal – carriers and the rest who are not in coal-carrying trade on the bicycle to as the mainstay of their livelihood, were asked the similar question. Interestingly, both the community responded largely in the negation of any social alienation or seclusion of members of each community. However, in informal of the record interaction with the members of the cycle coal- carriers confided into the researcher the grudge and deep sense of resentment for the discrimination meted out to the members from the others. most of the social gatherings and family functions of the Non-Coal – Carriers on Bicycle ( NCCB) community avoid an invitation to those coming from the Informal Coal- Carriers on Bicycle (ICCB) community, not only this day to day social interaction among the two is also minimal. However, it must be noted here that there is neither any enmity nor clash of any interest between the two. paradoxically the two complement each other in terms of the informal economic activities. The Poda ( processed or burnt coal) is provided by the NCCB on a fixed per bag price to the ICCB, who upload them onto their bicycles and set off for the further journey to nearby cities. The attitudinal perception about the coal – carriers couldn’t be captured quantitatively.

All the other objectives and subsequent research questions are addressed in the study and are reflected in the final report.

### 13. ACHIEVEMENTS FROM THE PROJECT

The University Grants Commission (UGC), New Delhi Sponsored Major Research Project (MRP) in all its limitation could come out with some fresh perspective about the Informal Coal Carriers on Bicycles, thoroughly neglected and grossly overlooked by academics as well as the governments of the land.

Achievements:

1. To quantify the achievements is always difficult. However, the new perspectives related to the cycle coal carriers manage to bring forth is quite significant. The coal mining areas and the illegal and legal mining practices have always been under the investigation and rims of papers written on the matter. The study of the cycle coal carriers as a community notwithstanding the nature of trade they are in has not been attempted in such a manner before. Not to belittle or undermine the previous works done on the issue, the author wants to reiterate that the socio-economic and livelihood strategies and the subsequent pattern of the community have been the soul of the study. The study cautiously and mindfully restrained itself from delving into the illegal and legal coal mining issues in the coal-bearing regions of the state of Jharkhand, so dear and popular among the academics, world over.
2. The misconceptions regarding the Informal Coal- Carriers on Bicycles, thanks to local media and folklores, the study systematically and successfully counters.
3. The study establishes with the help of the statistics (aided by several statistical tools) without any ambiguity that of all the communities living in and around the mining areas and dependent upon coal for their livelihoods, this is the only one who adds to the regional unorganised economy.
4. The study justifies the use of prefix 'Informal' against the coal- carriers on bicycles as a community, is also justified and in way attacks the wrong perception the society is having about them.
5. The stigma attached to these cycle wallahs since ages is seemingly unfounded and must therefore be removed, the study suggests.
6. The livelihood resilience being wafer-thin for the community in consideration has a serious bearing upon their livelihood pattern and as the study suggested unless they are exposed to an alternative source of livelihood, the precarious economic status may persist.

#### **14. SUMMARY OF THE FINDINGS:**

The project had the cycle coal-carriers at the centre and focus of the study. The socio-economic profile and mapping along with the vulnerability quotient in the context of livelihood regime and pattern of the community are collateral to the central theme. The livelihood pattern and its vulnerability to the climate change and other hazardous situation confronting the hapless cycle coal-carriers, is computed and Livelihood Vulnerability Index (LVI) for coal – carriers and non-coal- carriers on bicycles arrived at using the Hahn et al. method, is explanatory in itself. The highlights of the findings are enlisted here.

The Livelihood Variability Index (LVI) also known as ‘Pentagon Approach’ is on the higher side as compared to the other communities. The higher LVI is indicative of low resilience and high vulnerability towards climate change and hazardous situation for the cycle wallahs. The complete dependence on the mineral for their livelihood, absence of any other source of income, agricultural produce being paltry, and no social security net, the community failed miserably on all the five assets of the livelihood index. Coal continues to occupy a very significant role among the lives of those in and around the mining region. With an average per month earning hovering between Rs. 5.6 to Rs. 8.8 thousand and little diversities and low resilience to the livelihood pattern, the informal coal-carriers continue to languish in a wretched condition in want of alternative source of economic sustenance.

The medical-related issues top the priority list on expenditure. The extremely draining and taxing hard work and the ambient dust-laden, coal ashes filled fine soots and solid particulate matters suspended environ engulfing the residential areas, take serious toll of the health of the coal-carriers as well as their family members. The findings suggest that most of the coal-carriers and their family members suffer from the respiratory and pulmonary diseases few of them (based on personal interaction) were having cardiovascular ailments which keep on aggravating in want of proper medical attention. The community have hardly any surplus to cater to the needs of the ailing members. However, the statistical analysis points towards the fact that it is among the top priority after the essential daily expenses. Other heads of expenditures do not exhibit the same level of a significant relationship and subsequent dependence upon the monthly income. Complete lack of diversities in the livelihood pattern and very poor resilience to external factors bringing negative change led to precarious and deplorable economic condition.

The reason (s) behind the vicious cycle of getting trapped in a heart wrenching, low- yielding and hazardous trade is lack of any viable livelihood alternative. The average age of induction

into the trade is twenty-four. Delay can be explained on the efforts put in by a young boy of the family to get into an alternative economic activity, most of them admitted candidly that with no luck they had to necessarily come to the fold of the family trade of coal- carrying.

The stigma of being perceived as a community engaged in criminal and illegal activities of coal theft for generations is deep-rooted in the psychic of the coal – carriers. A general sense of apprehension, deep feeling of guilt, scornful and hostile attitude towards the mainstream society laced with complete lack of trust in police administration and the CCL authorities, have turned the community away from the society. Unfortunately, the chasm along with trust deficit is growing day in day out. Any step or crackdown intended to check the practice may backfire and the community may retort to anti-social and criminal activities to sustain themselves. The author does not advocate the legalization of the practice, however, is firm of the view that the issue should have a humane and practical solution. Putting in the centre the Informal Coal-Carriers on Bicycles (they buy not steal or illegally procure the raw coal in the form of ‘Poda’, before bringing them to the markets of Ranchi ) in the ‘Scheme of things ‘ by the government, will help usher in a decent, dignified, and guilt-free better life for thousands of hapless coal-cycle pullers.

## **15. Contribution to the Society:**

The curious and awe-striking sight of the beeline forming human – cycle -coal combination negotiating the tough and circuitous highway from the Ramgarh Coal regions to the city of Ranchi, creates a huge amount of curiosity which triggers an insatiable desire to know more about cycle pullers with incredible and overwhelming loads stuffed in the cycle. The precarious economic status coupled with enervating and highly taxing physical labour exposing oneself to all kinds of hazard vulnerability, trigger a desire to look into the lives of the hapless community, which Prof. KL Dutta famously called ‘ coal cycle wallahs’.

The study focused on the lives of the cycle pullers unearthed some lesser-known facts and aspects of their livelihood pattern and social status. The compelling forces and idiopathic economic practice of the community.

Once quoted as one of the biggest criminal community of independent India, the coal-carrying cycle wallahs continue to struggle for dignity and to get rid of the guilt. The study brings forth before the society the real issues plaguing the community. the findings once brought to the public domain would go a long way in clearing the myths and misconceptions afloat, in the society. The cloud of negativity and misinformation is vapourised.

Though have meagre and almost hand to mouth existence the informal coal carriers on bicycle substantially contribute to the regional economy. Out all the informal activities being carried out in the coal mining regions of the state of Jharkhand and elsewhere in India, the bicycle coal carriers are the only community who draw their sustenance and the livelihood on the major mineral buy it in the form of ‘Poda’ before taking them to the nearby cities to market it to the variety of consumers ranging from small tea stalls, brick kilns ( in some cases) to the households. The informal or the unorganised economic activities in and around the coal mining areas in Jharkhand in general and in the Ramgarh coal region, in particular, are widespread and substantial. A large chunk of the population residing in the influence region of a mine is dependent upon the informal activities related to the mineral being produced. the study highlighted the difference among the coal carriers on the bicycle and other communities sustaining their livelihood from the coal in the study area. Unlike other communities, the cycle pullers buy the processed raw coal ( locally known as ‘Poda’.) at the rate determined by the poda makers. Poda makers are the local inhabitants living in and around the proximity of the coal mines areas. These poda makers procure coal by various means including stealing from the dumping sites, excavating from the abandoned and discarded mines and also manually digging



village mines. In a contrast, the Informal coal carriers on cycle are not involved in either of the activities. Buying illegally procured coal and selling them off legally is what distinguishes them from the others. The study successfully explains the cardinal position of ICCB by giving the initial thrust in the informal economy of the coal region.

It is now a well-established fact that all other communities who are directly and indirectly dependent upon coal save the cycle pullers have a very closed and inward-oriented trading pattern. Coal carriers act as the only window for the regional informal activity to the external world. All the informal and illegal activities of procuring coal is dependent upon selling them after processing to the cycle pullers, in want of which the livelihood regime of the inhabitants of the region would have been completely different. In a way, the Informal Coal Carriers on Bicycles (ICCB) are the real engine and thrust for the micro-regional economy. The new perspective, would in the long run help build a positive and unbiased attitude towards the community.

The investigation also highlighted the resilience to the hazard vulnerability and livelihood strategies of the community under study. A significantly large number of inhabitants in the outskirts of the mining activities are in this trade simply because of lack of any alternative source of income. Most of the households do not possess any arable land, those who have small holdings, unable to practice cultivation owing to poor fertility. The badland coupled with lack of logistic infrastructure render the landholder shun agriculture altogether and continue with the age-old trade of coal-carrying on bicycles. Availability of alternative sources of income and opportunities for the diversification of the livelihood strategies are some of the core issues, the authorities must sit up and take notice.

A more sympathetic and encompassing approach on the behalf of the society is required so that the general perception of mistrust, deceit and illegality associated with the community gradually but surely wanes off.

During the extensive household field cum village survey in and around the Karma Coal Project Open Cast Mines and Rajrappa Project Coal mines, the author interacted with the families and the head of the household of those who are in the trade of carrying processed coal (Poda) on bicycles to the city of Ranchi along with those families who aren't in the trade but draw sustenance from illegally coal hoarding and other activities. Interestingly, coal occupies the cardinal position in the livelihood pattern of all communities in the influence area of the mining region, however, with a difference that the cycle coal carriers are solely dependent upon the

mineral which they buy from the others. whereas, others (as the **Livelihood Vulnerability Index- LVI**, calculated by the author indicates) are placed slightly better in terms of the resilience to sudden and significant external changes in form of hazards, for they have more diversified livelihood strategies. The social interaction among the various communities (the communities based on their activities are broadly classified into two categories, first whose sole economic activity is carrying processed coal on bicycles to the nearby cities, in this case, Ranchi to sell, called Informal Coal – carriers on Bicycles – **ICCB** and the rest who are also in illegal coal collection through various channels but don't carry it to cities for selling – Non-Coal-Carriers on Bicycles – **NCCB**.) wears a distinct pattern. the ICCB community is not readily and warmly welcomed in the social gatherings and family functions organized by the others. however, it must be added here that the chasm between the two is not so pronounced yet for a keen observant the subtle undercurrent is loud enough not to be missed.

Stigmatising and keeping at bay a diligent community for generations, has the perfect recipe to further alienate them from the mainstream society. Attitudinal change is among the few foremost important things we need to inculcate among ourselves.