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Long Distance Bus Transport Nexus LOCAL Economic Development and Poverty Reduction in Africa: Emphasis on Addis Ababa, Ethiopia

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Abstract—This article presents long distance bus transport nexus local economic development and poverty reduction issues in Africa, and it has focused on the city of Addis Ababa, Ethiopia. The methodology was focused more on both primary and secondary sources. The primary informants were principally distinguished from the Passengers, the operators, and the key government officials such as the Transport Office including the head of bus terminal, head of Bus Associations, and selected experts in the sector. In terms of analysis, the qualitative approach was done by using a thick description. The finding revealed that on average, over thirty major towns have a direct link with the center and poverty reduction. The sector has also shown inalienable and inseparable with both poverty reduction and local economic development. Thus, it can create good grounds for urban growth by upgrading the existing towns, and it is also opening the doors for emerging new towns. It has been a unique contribution and creates various work opportunities for both literate and illiterate peoples and it also has an impact for poverty reduction and local economic development. The reduction of poverty and local and regional development is unattainable without a proper policy framework for all passenger transport in general and LDB in particular of government.

Index Terms—Long Distance Bus, Poverty Reduction, Bus Association, Policy Target, Economic Growth and Local development

I. INTRODUCTION

Ethiopia is found in the Horn of Africa with the area covering approximately 1,221,900 square kilometers, it is nearly the size of France, Germany and the United Kingdom combined (AACC, 2009). Ethiopia is astronomically located 3°-15°N and 33°- 48°E (ERA, 2005 and CSA, 2007). The altitude ranges from 1,500 to 3,000 meters above sea level. World Bank (2008) depicts that Ethiopia had a population of 76.5 million in 2007, the existing population of Ethiopia will be over 120 million. This made the nation the second most populous in Africa, after Nigeria. And it will reach 180 million in 2050 (Oladele, 2010).

The physical set up of Addis Ababa is found at the heart of the nation and is at 9°02'N to 9.03°N 38°44′E to 38.74°E (ERA, 2005 and CSA, 2007). Addis Ababa is the capital city of Ethiopia and Africa. Again, it is the largest city in Ethiopia, with a population above 5 million. And various estimates also depict that until 2020 the city is expected to host 6-7 million inhabitants (Iginis, 2008 as cited Mesfin 2009). The City of Addis Ababa has the dual status of both a city and a state capital (CSA, 2007 and MoFED, 2006) (Map 1). Transport has a necessary role to play for economic growth and social development of Ethiopia. Among other modes, Land transportation particularly, and road transport is the most widely used transport sector all over the world. It also provides a base for local, national, regional and international flow of goods and passengers. Asnake (2006) states that the road transport sector plays a significant role in developing countries national economy through direct contribution to GDP and employment. Indirectly it also provides services indispensable for the development of other economic sectors. Road transportation plays a vital role in distributing essential goods and services from place to place (Herbert, 1979 as cited in Yayeh, 2003).

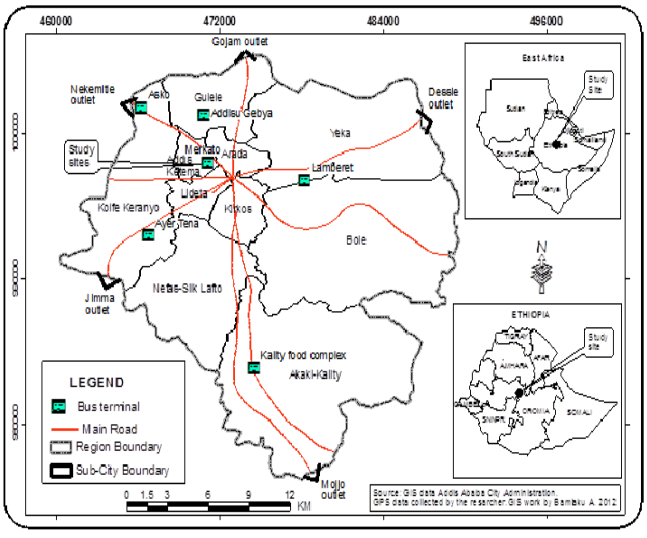

Figure 1**:** Map of the geographic placement of Ethiopia and the capital-Addis Ababa

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In Africa, road transport is the most dominant mode of motorized transport that accounts for 80 per cent of the goods traffic and 90 per cent of the passenger traffic in the continent. Three modal systems of transport exist in the nation (road, air and rail). But studies conducted in the nation by ERA (2005) and EFTA (2011) noticed that about 99.31 per cent of the total passengers used road transport for their mobility, 0.65 percent used airline and 0.04 percent used railway transport. This indicates that the mobility trend of the society is highly dependent on road transport than other modes (ERA, 2005). And the Ethiopian Federal Transport Authority EFTA (2011) reports the sector is facing certain challenges because the entire people of the nation highly lies on road transport rather than other alternative modes. There is also a prevalence of poor quality of services in the sector. As the result noted, that exists in road passenger transportation of the nation is not satisfactory. This implies that to maximize service satisfaction, the need to work more for the industry is important.

The EFTA (2011) report indicated there is a slight growth in the passenger transport industry particularly in the medium commercial passenger transport (about 15.7%). The maximum growth (74.7%) is registered in the small commercial passenger road transport sector such as the Mini buses while long distance buses showed a slight increase of (9.6%). The report further indicates that in 2010, the total passenger transport vehicles that rigorously served the society were 13, 684 buses. Of these, (about 7.75%) were long distance buses with 44 and above seats and the rest 12, 623 (about 92.25%) were buses with 24-44 seats. This indicates that the growth of cross-country commercial passenger transport is relatively low in terms of quantity. This puts the adequacy of the service provision into questions.

Regarding the passengers transported, the CSA (2009) reports of passenger and freight transport activities in the nation. This indicates that in 2004 to 2008, the growth rate of transported passengers by medium and large passenger road transport has risen from 4.1 to 6.7% (SBPLC, 2009). In terms of passenger transport, Addis Ababa holds over 75% of the nation. Again, out of the total national vehicle's population about 400,000, i.e., about 130,000 vehicles in the country in 2004. Of these, the passenger road transport of the city consists about 45% of the total vehicle stock (EFTA, 2011).

Again, from the total long distance bus transport of the nation, about 90% are found in the city. It is why; the investigator should make this study in the city. This research focuses on passenger road transport mainly at Addis Ababa-the national capital. It also examines the roles of transport in linking the capital with other cities and towns. Despite the growth of the passenger road transport, the adequacy of the sector focuses more on the supply and demand situations. The demand can be seen from the passenger side (operators). The knowledge of structure and adequacy also help to identify critical areas of intervention to improve the service.

Existing studies on transport carried out in the nation don't properly address the issue under investigation. For instance, ERA (2005) in designing national urban transport policy examined only the general nature of the road network rather than the inter-urban passenger transport. Mintesnot and Takano (2007) made a diagnostic evaluation of public transportation mode choice in Addis Ababa specially focusing on intra-urban government bus transport. And, as AACC made a study in 2009 entitled on the management of commercial road transport in Ethiopia. Among these and other studies, no one can investigate long distance bus transport nexus local economic development and poverty reduction focusing on Addis Ababa Ethiopia. These indicate there is a gap in the studies regarding the role of the sector. Therefore, this study should fill that gap and investigate the long-distance bus transport nexus local economic development and poverty reduction.

II. OBJECTIVES AND METHODOLOGY

The focus of this study is to assess the long-distance bus transport nexus local economic development and poverty reduction focusing on Addis Ababa Ethiopia. Therefore, as per the insight of this objective the following methodological mechanism was undertaken. Because of research design, both qualitative and quantitative approaches were chosen for research analysis, but high emphasis is given to qualitative and less weight for quantitative approaches. The philosophical Views of the study are focused on the positivist deals on quantitative mechanisms while the phenomenological one focused on interpretative ways. Both primary and secondary data sources were used (the primary sources) mainly obtained via interview, structured interview (questionnaire), observation tools and focus group discussions.

On the subject of place and study site selection, it was carried out in the city of Addis Ababa especially on Mercato terminals (Maps 1). It has been the main and the only national bus terminal where the survey was made in 2014/14 that serves the whole nation and it is also placed at the center. The selection of routes and towns of the survey was carried out by using a lottery method. Out of 5 major highway routes, four towns were selected (Metehara, Debre Sina, Gebre Guracha and Hosanna) by lottery method. And the key government officials that work on the formal LDB such as heads of bus terminals, head of bus Associations and traffic officers of the cities were interviewed.

In this way, selected types of informants distinguished; principally selected 241 informants were taken from the Passengers of LDB. The researcher selected passenger about 10% from each bus and these individuals were asked to fill the questionnaire and about 6 passengers from each sampled bus multiplied by 8 buses and multiplied by four routes at two survey seasons i.e. (6*8*4*2=384). Totally, 384 surveyed passengers were also addressed. Out of this, about 241 questionnaires were completed and returned. The passengers' selection also applied by using a systematic approach that took the K^{th} bus alongside the sampled routes.

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The operator selection was about 64 buses or operators selected by systematic sampling for the total Buses that were dispatched from the terminal. It is found there are about 100 to 120 large buses which leave the terminal and a similar amount also enter the terminals per day. Out of these, 6% of the buses from each route were selected from both coming and going along 4 routes at two survey seasons. The bus selection is identified by plate numbers, side reference numbers, and name of Associations. Therefore, the researcher took 64 drivers/operators to fill the questionnaire.

The questionnaire was the main data instrument. It incorporated about 87 questions for operators and 70 questions for passengers. The questions were primarily focused on roles of the sector effect on economic growth and poverty reduction. The data from passengers and operators were made by longitudinal survey for four times at two off and on journey seasons. It takes place within 2011 and 2012; particularly it carries on 1 September up to 15 Jan (on-season) in 2011 and April to May 2012 (off-season).

Observation was guided by a checklist mainly focused on the challenges of the sector that took place mostly at early and late evening for some consecutive days. The other informants, particularly off-journey passengers at their loading place or in the terminal, were part of Focus group discussions (FGDs), comprising 4 or 5 participants. The analysis was also made based on some quantitative subjects like the inferential statistics and the high emphasis given for qualitative and content analyses were undertaken based on open-ended questionnaires and informal oral and structured interviews. It was primarily carried out by using thick descriptions on the issue.

III. Result and Discussion

A. LDB Nexus LOCAL Economic Development and Poverty Reduction

This study expresses the general roles of the intercity bus reducing poverty with a strategy for local economic development. The model in Figure 1 below displays the link amongst the roles of LDB/PPRT with local economic development and poverty reduction. Poverty has a multifaceted bond with all components in the model.
The researcher can describe each variable on the model such as poverty reduction, local development, alternative off-road transport (rail) and policy objectives of PPRT/LDB service. The LDB has also had various roles to the Poverty reduction and for local and regional growth. See on fig 1.

B. Contribute to the reduction of Poverty

Poverty has to be the target of every entity in the nation starting from federal to local levels (Richard et al. 2000). In this model, poverty has a central position, which notifies its integrating power as a cause and consequence with all variables. The model presents the different policy strategies linked to reducing the rate of poverty and increasing the local economic development. The advantages gained from the transport industry are to reduce poverty by creating job opportunities for all walks of life.
In 2011 and 2012, the industry employed over 30 000 individuals including workers at the associations. In comparison, among the three places that get the service from intercity LDB, more in transition towns than that of origin and destination places because LDB transport provides plentiful roles to transitional towns. Thus, the sector has contributed a lot to alleviate poverty reduction as at the same time contribute for economic growth.

C. Supplies for Local economic development

The theory of Local Economic Development highlights components such as the prevalence of specific government policies; technological innovations; relatively cheap transportation assisted by road building; inexpensive communication and the end of the era of industrial production, permitting firms to locate suppliers at a distance from consumers (Richard et al. 2000). Local economic development has provided efficiently the essential public services like schools and infrastructure. Local economic development is facilitated by the transport sector providing relatively cheap and essential transport services to society.
The LDB has contributed to local economic development, by creating job opportunities for both the illiterate and literate classes of society. This implies that long distance transport has a great link to eradicating poverty and promoting economic and local development. However, in this study, the bonds between towns and cities are tied to each other because geographic integration is considered advantageous for rural urban linkage. Both local economic development and eradication of poverty have a mutual relationship.
Again, this agglomerate effort creates better opportunities for the growth and development locally, regionally and nationally. Figure 1 below explains the cumulative interlinking in the structure of the industry; it also refers to the accessibility and connectivity of the town; the provision of quality service paves the way for the existence and occurrence of growth and development. Finally, it decreases ruralisation and increases urbanization by reducing the rate of poverty, which is viewed as a prerequisite to local and economic growth.
The study reflects the roles of LDB transport in linking Addis Ababa to other cities and towns (RUL and the linkage of metropolitan areas). The industry has provided various roles for every person. The industry is mainly to provide road transport for passengers traveling along the five major outlets, Mojo, Dessie Gojam, Nekemit, and Jimma. In terms of metropolitan linkage, these outlets can link headquarters with the hinterland. LDBs serve along the outlets that interlink the city in all directions of the nation. The study found that on average, over thirty major towns have generated a direct link with the center.
The data shows that the existing total including large, medium and small towns found along the main outlets is forty-two. The highest number of towns is found along the Inde Selassie and Gonder routes, which are seventy-eight and fifty-two, respectively. This availability of towns has come about mainly because of the accessibility of the routes and the demands of passengers. This is supported by the endogenous growth theory of Romer (1994), who holds that economic growth is primarily the result of endogenous investment in human capital, innovation, and knowledge. This can create good grounds for urban growth by upgrading the existing

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towns and opening the doors for emerging towns. Therefore, the sector has contributed towards the growth of towns.

The role of LDB transport plays a key role in transitional towns than source and destinations. The reason it plays a high role in transition is it is a place where passengers stay for an hour, to relax, eat and drink whatever is available. The finding showed that all towns along the main route benefited from the industry, so that LDB has visible and direct benefits for transitional towns and for the core to periphery.

This model indicates that the three components (LDB, poverty and local and economic development) are inalienable and inseparable. They are interwoven like gears in a machine. If improvements are made to LDB, it stretches its service to inaccessible peripheral areas whilst keeping the cost of transport affordable so that poverty would be reduced and local economic development would increase. The major targets of development theories are to address the problem of the poor and pull the economy of the nation up in line with middle-income countries (Figure 1 below).

D. Alternative off-road transport (Rail)

The other component to this model is that the sector has created an alternative off-road intercity form of transport, catering for people from all walks of life, that of rail. Again, if local economic development appears in areas, infrastructural facilities are improved and extended. Rail transport is not the only transport sector, but it is a substitute and alternative means of transport. This form of transport can carry a heavier load of passengers and goods. Compared to road transport, it is the cheapest means of transport, and there needs to be an expansion of alternative off-road transport, like rail transport. Again, it also contributes by diminishing the existing congestion on PPRT/LDB, and plays a notable role in the reduction of poverty and the increase of local economic development.

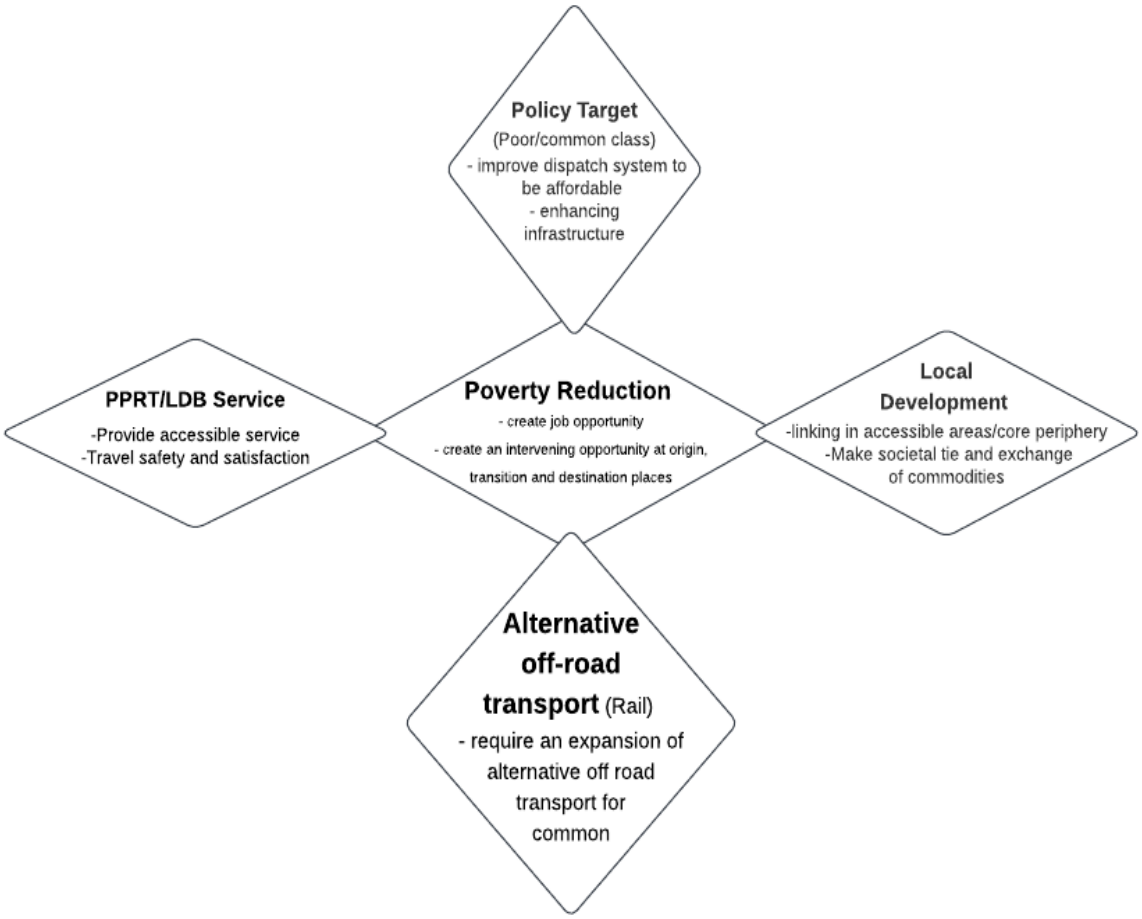

Fig 2: LDB/PPRT nexus with local economic development and poverty reduction
Source: designed by the researcher in 2014

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IV. PUBLIC PASSENGER ROAD TRANSPORT (PPRT) AND POLICY ISSUES

The remaining components of this model are public passenger road transport, PPRT and policy issues. The PPRT is a generic name that includes much passenger road transport, but the LDB service focuses only on long distance passenger transport that interlinks different cities and towns. The sector has provided three big components; accessible service, passenger satisfaction and a focus on travel safety. It

is in this study that the best effort has been made to provide quality service, which means providing sufficient transport for commuters. PPRT is very important, playing a key role in third world countries. It must be a major target for the reduction of poverty and development. To accomplish this purpose, the government must have a proper policy framework for PPRT in general and LDB in particular.

The other variable within this model is policy issues. Some policies will improve the dispatch system, service provision and rate of satisfaction; fare setting, inspection processes, travel safety and traffic management. The policy issues would focus on the associations' service provision, the safety and service and enhancing the buses. This requires integration among stakeholders; shifting and decentralizing the service to the preferred regional capitals, extending the LDB Service to neighboring countries, and upgrading the association to a corporate company. However, in this model the policy issues explain the overall effect of the transport industry reducing poverty and promoting local economic development. Therefore, LDB plays an important role in the fight against poverty.

V. CONCLUSION

The conclusion reflects the role of LDB transport plays a key role in transitional towns than source and destinations. The reason it plays a high role in transition is that it is a place where passengers stay for an hour, to relax, eat and drink whatever is available. The finding was that all towns along the main route benefited from the industry. The role of LDB has visible and direct benefits for the selected transitional towns and for the core to periphery areas.

Beside the roles of LDB at origin, transition and destination towns and their linkage to each other the model shows how inalienable and inseparable PPRT is with poverty and local economic development. Thus, one of the unique aspects is that various literate and illiterate people in the sector get work opportunities and it is put in for poverty reduction and local economic development. The role of the sector contributes to people in all walks of life wanting to travel intercity. The model describes how the sector provides overwhelmingly to all beneficiaries. The sector plays a prominent role of contributing to society by producing job opportunities for the majority of jobless societies in general.

Recommendations

As to the foregoing discussion, these key points were provided as possible suggestions to improve the overall situation of supply and demand of long-distance bus transport. These strategies were forwarded in priority order in terms of their weight for government and bus associations.

- Work with stakeholders to reduce passenger congestion in the terminals and the government should expand Long Distance Bus Services to neighborhood countries
- The government should upgrade the standards of Mercato Bus Terminals
- Shift and decentralize the service sectors and selected International and Federal offices to the preferred Regional Capitals and

- Decentralize the service of LDB to all major towns.

CONFLICT OF INTEREST

The authors declare no conflict of interest

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