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ADVISORY SUPPORT INFORMATION SERVICES AND TRAINING FOR EMPLOYMENT-INTENSIVE INFRASTRUCTURE
A Programme of the Employment Intensive Investment Branch of the International Labour Organisation (ILO)

IMPROVING LIVING CONDITIONS AND PROVIDING JOBS FOR THE URBAN POOR

By Tomas Stenstrom, ILO/ASIST, Zimbabwe

INTRODUCTION

Unprecedented urbanization rates in most developing countries are changing the face of poverty. Poverty levels are rising in cities. Millions of jobseekers are drawn to cities and end up in the urban informal economy, earning just enough to survive, without any form of social security for themselves or their families. Most cities cannot cope with this influx, their infrastructure is underdeveloped and in a bad state of maintenance, and services do not function or reach the poorest neighbourhoods. In addition to low incomes, poor urban dwellers are exposed to health hazards due to bad drainage, waste accumulation, and inadequate sanitary facilities and so on. Yet, cities are also places of opportunity. Urban planners, policy makers and authorities must address the dual pressures of providing infrastructure and services, and creating conducive environments for employment



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Hanna Nassif, upgraded urban low income settlement, Dar es Salaam, Tanzania

generation particularly for the youth that represent the large majority of unemployed.

There is growing recognition that infrastructure investments represent enormous untapped potential for the creation of productive employment and interest in the need to link job

IN THIS ISSUE

Welcome to this issue of the ASIST Bulletin. We have introduced some changes to the Bulletin. With the introduction of our E-newsletter, which contains news, events and announcements, the Bulletin will only contain articles on policy, practice and experience. We hope you will find this issue informative.

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creation to infrastructure investments and to urban and local development policies. The African Union (AU), the New Partnership for Africa's Development (NEPAD), the Commission for Africa and many national development plans of African states call for increased infrastructure investments and identify such investment as a means to create jobs.

ILO supports member states optimise employment opportunities in rural and urban infrastructure investment programmes including urban slum upgrading. Key components of ILO's support towards urban slum-upgrading programmes are: i) public-private partnerships (PPP); and ii) employment-intensive investment strategies. Important synergies can be created if infrastructure and service delivery to improve living conditions in urban slum areas are conceived as opportunities to create jobs and to involve the small-scale private sector, community groups, micro-enterprises, local organisations, etc. An essential element of such a strategy is the development of partnerships between different urban actors i.e. the municipal and local authorities, the private sector and the communities themselves.

KNOWLEDGE SHARING WORKSHOP

The Employment Intensive Investment Programme (EIIP) of the ILO carried out a knowledge sharing workshop on "Youth employment and urban development - Employment aspects of municipal service delivery" in February 2006. The workshop was organised in collaboration with the Expanded Public Works Programme (EPWP) of South Africa. It brought together policy makers and practitioners from Ghana, Kenya, South Africa (SA) and Tanzania. The objectives of the workshop were to share experience and lessons on the employment aspects of slum upgrading and urban development, as a basis for future action in the context of country programming and conceptual development, with a particular focus on youth.

The workshop was informed by three key elements, namely:

- Findings of recent research in SA on employment aspects of slum upgrading;
- Lessons from an ILO employment creation in municipal service delivery project in

Tanzania; and

- Lessons from the ILO Ghana Decent Work Pilot Programme, aimed at integrating employment, infrastructure investments and local economic development.

A brief presentation of the key inputs and workshop recommendations follow below:

SOUTH AFRICA: EMPLOYMENT ASPECTS OF SLUM UPGRADING: PRACTICES AND OPPORTUNITIES IDENTIFIED IN TWO SOUTH AFRICAN CASE STUDIES

Glen Robbins, a research fellow at the School of Development Studies at the University of Kwa-Zulu Natal led a team of researchers in a study commissioned by the ILO/EIIP to investigate employment aspects of slum upgrading in South Africa.

The objective of the study was to examine the employment aspects of past, present and future of slum upgrading programmes in South Africa, focusing on labour-intensive technologies, private sector involvement (PPP), community participation, as well as skills development. All slum-upgrading programmes ultimately aim at improving the living conditions of the urban poor. However, the employment outcomes are different according to the way things are done. The study makes recommendations on opportunities for further employment generation in slum-upgrading programmes, particularly in South Africa. The final report provides an outline of the evolution of South Africa's policy with respect to employment and housing.

The study focussed on two case studies Cato Manor and Voloorus. The case studies highlight the shortcomings in the policy context, restrictive regulations and the lack of flexibility. However, the case studies also illustrate that greater employment gains could be secured through complementary measures in areas such as local contractor development, skills development, involvement of the beneficiaries and more effective planning and design. Areas that could be improved to enhance employment include more innovative approaches to planning and design, developing materials producers and suppliers and sustaining employment interventions beyond the housing delivery phase of a project into service provision and other activities around social infrastructure provision.

RECOMMENDATIONS MADE INCLUDED:

- The importance of making explicit commitments to employment as a key outcome of shelter-related activities in national policy.
- Need to refine regulations to allow for a greater level of local innovation.
- Need to work to secure matching resources from programmes and local economic development interventions at the local level to help secure employment on a more sustained basis.
- Need for continued focus on local contractor development, but widening the range of contracted activities.
- Need to explore how sourcing of materials could be used in support of greater employment creation.

TANZANIA: ILO SOLID WASTE PROGRAMME: EMPLOYMENT CREATION IN MUNICIPAL SERVICE DELIVERY

This programme seeks to involve local communities and entrepreneurs in affordable service delivery through a public-private partnership (PPP) arrangement.

The current programme was initiated in 2003 and builds on a pilot project started in 1996 that involved the use of the private sector franchises, in solid waste collection – as a means to deal with the dual problem of waste management and unemployment. The approach is now being up-scaled and replicated across East Africa in Tanzania, Kenya and Uganda.

ILO's role has been to provide support to broad policy development, technical advice on enabling systems for PPP's and capacity building of all stakeholders both private and public sector to undertake their specific roles. This has included awareness building, facilitating linkages,

developing procurement systems, and health and safety frameworks. The programme is based on the principles of participation, capacity building and inclusion. All stakeholders are involved in the planning, implementation and management including individual users or group of users, institutions of local government, civil society organizations such as NGOs, local political leaders and structures, and external donor agencies. Some of the achievements include:

- Major increase in levels of waste collection in seven municipalities in Tanzania – for example waste collection and disposal increased from 28% in 2003 to 47% in 2004 for Mwanza City.
- 90 enterprises established with 4000 employed.
- More than 70 small and medium enterprises (SMEs), community-based organisations (CBOs) have been trained to efficiently manage solid waste management (SWM) activities, including re-use, recycling and composting initiatives for more income.
- Associations for service providers established in six municipalities for collective bargaining.
- The programme is being replicated and is working with UN Habitat in Somalia, Cities Alliance and the World Bank Community Infrastructure Upgrading Program (CIUP) in Dar es Salaam.



Collection by franchise in Dar es Salaam, Tanzania

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GHANA: EXPERIENCE FROM GHANA DECENT WORK PILOT PROGRAMME

The Ghana Decent Work Pilot Programme (GDWPP) is an initiative of the ILO, the Government of Ghana and the Social partners (Trade Union Congress and Ghana Employers Association). It aims at contributing towards the national priority goal of poverty reduction through the promotion of decent work in the informal economy. The project approach is founded on the ILO notion of “decent work” i.e.:

- Right to employment and adequate income for basic needs;
- Freedom, basic rights and opportunities;
- Safe working conditions and income security; and
- Voice, self esteem, self fulfilment and dignity.

A key target of the programme has been to get the Ghana Poverty Reduction Strategy Paper (GPRSP) to identify decent work – not just job creation. The project strategy involves two inter-related components; at national policy level to support policy formulation, dialogue and capacity building of government, employer and worker organisations; and at district level aimed at piloting local and social development in two districts.

The pilot has created business information centres and business directories at the district level to support the formation of small and medium enterprises (SMEs). The project has also developed manuals and trained on small business associations, carried out SWOT analysis and prioritisation of business sub-sectors and held a labour-based workshop for a road project to be implemented.

In terms of overall project results, the informal sector is now a priority at a political level. The Ghana Poverty Reduction Strategy (GPRS) II is explicit about the informal sector and decent work. There is enhanced awareness of decent work issues amongst employers and employees, and better dialogue between them. The programme focused on women, as most informal

enterprises are headed by women and informal enterprises make up the bulk of the businesses concerned.

EMERGING ISSUES AND RECOMMENDATIONS FROM THE WORKSHOP

The workshop identified several areas that need to be considered in promoting employment intensive approaches in municipal infrastructure and service delivery, and youth employment issues. Key was the sharing of information and best practices to secure political will and acceptance at all implementation levels for the shift towards involving private sector and community groups and putting employment issues as a primary objective in the development process.

The emerging issues and some of the recommendations have been grouped under subheadings below.

POLICY

Greater effort in reforming policy and creating the right institutional environment is essential otherwise efforts of pilot projects are wasted and frustrated. It is equally important to make explicit policy commitments to employment



GDWPP, Ghana

Women fishmongers, Ghana

and to build this into planning, designing and implementing of municipal service delivery. This should include procurement policies, how to engage private sector and communities in public private partnerships, how to target vulnerable groups, and also how to tackle the issue of subsidizing services versus full cost recovery.

OPTIMISING EMPLOYMENT CREATION OPPORTUNITIES

The optimisation of local labour and resources use implies integrating considerations of time, cost, productivity and quality and these should be seen in the broader development context (beyond the specific project). Both tradeoffs and possible synergies need to be explicitly identified and addressed.

Linkages due to choice of material and technology used have implications on employment creation. It is important to consider supply chain of materials when looking at the employment potential. An individual project is often too small or short in duration to warrant production and supply of material locally. However, this is an area that can and should be looked into in a broader context.

Design as a specific intervention can be used to optimize use of local labour and resources in the delivery of infrastructure. Design also influences materials used and aesthetics, which have important impact on job creation and sustainability. In general, innovative interventions should be encouraged to optimise use of local resources and creation of employment opportunities.

IMPACT, MONITORING AND EVALUATION

To truly measure the employment impact in urban infrastructure and service delivery there is a need to develop useful employment impact methodologies and indicators as well as a comprehensive monitoring and evaluation framework. Employment impact studies should be compulsory for major slum upgrading programmes/project and should be considered during the conceptualization phase, just as it currently is the case for environmental impact studies of major investment programmes.

PRODUCTIVITY AND COST BENEFIT

Capacity and skills building of stakeholders in public and private sector, including emerging contracts and entrepreneurs involved in service delivery in both technical, entrepreneurial and management is essential for high productivity of labour-based programmes. In particular, targeting youth with low skill levels requires investment in skill building to achieve productivity and quality.

An array of arrangement and support is

necessary to ensure productive partnerships and appropriate institutional support, and the benefits and cost effectiveness of building in training, empowerment and employment aspects should be viewed throughout the entire development process.

EDUCATION AND THE LABOUR MARKET

Education curricula in most African countries do not nurture innovativeness and entrepreneurial skills necessary for self-employment. Curricula have not been adapted to meet the demands of the labour market, which is characterized by a growing informal sector being the main source of employment. Reforming of curricula to improve youth employability must take place, and support from relevant agencies such as United Nations Educational, Scientific and Cultural Organisation (UNESCO) sought to help lobby for the change of school curricula.

INFORMAL SECTOR

Support to the informal sector should ultimately aim at its gradual formalization. This process can be brought about as the informal sector becomes more organized and recognised, through association building, increased awareness of decent working conditions, etc. However, further attention needs to be turned towards improving working conditions to make the informal sector more productive and secure. Finally, efforts should be targeted not only to support informal economy operators, but also those who purchase goods and services from the informal economy.

The workshop report and the presentations are available at: <http://www.ilo.org/public/english/employment/recon/eiip/news/workshop.htm#southafrica>.

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MAINSTREAMING LABOUR-BASED METHODS IN ROAD CONTRACTING IN GHANA

By Tony Airey, IT Transport, ENG Ashong and Henry Danso, Department of Feeder Roads, Ghana



DFR/MST

Shafa-Mframa road, Sene District, Class C contractor on site with 30 workers

As a follow up to Simon Done's letter (Bulletin No.18, September 2004) on the need to mainstream labour-based methods, we wish to share with the ASIST-Africa audience the outcome of such a mainstreaming exercise in Ghana, one of the early success stories of labour-based contracting in Africa.

In 1999, an IT Transport (ITT)/Scott Wilson (SW) joint venture was awarded a Department for International Development (DFID) contract to assist the Department of Feeder Roads (DFR) in Ghana to plan and implement a road improvement programme in nine districts on the northern side of Lake Volta. While, DFID had an open mind as to what type of contractors would be employed to execute the works, DFR and the ITT/SW Management Support Team

(MST) saw this programme as an opportunity to maximise the livelihood impact of rural road construction by employing as many labour based contractors (LBCs) as possible. This was achieved using three approaches.

The first involved limiting the size of contracts so that only small contractors could tender for the works¹. The first round of road improvements on 38 roads involved the award of 62 contracts with an average value of \$125,000. These improvements involved the construction of a fully formed road

built to a six metre wide standard with appropriately sited cross drainage structures, raised low lying sections and a layer of gravel wearing course spread over sections where there was weak in situ sub-grade material.

The second pilot stage restricted the tender so that only LBC or Class C contractors could compete. The labour-based specialist on the team advised that there was a large enough group of labour-based contractors in Northern Region to form a competitive tender. So, after awareness-raising, contractor meetings and training in competitive bidding, 13 lots of road improvement works were advertised in Nanumba District for competitive tender by some 26 pre-qualified labour-based contractors (LBCs) in late 2000. The outcome of this restricted bidding process was disappointing since the Northern Region LBCs failed to compete and formed a cartel. Only four

¹ In the Ghana Ministry of Transportation Contractor Classification system, the smallest categories of road contractors are class A4 and C. The former are small equipment-based contractors, while the latter have been trained by the Department of Feeder Roads in labour based methods of road construction. Both categories can undertake road construction, maintenance, spot improvement and reshaping works of up to 80km; regravelling up to 20km, with a tender value ceiling up to US\$250,000, and no more than US\$400,000 of work on hand at any one time. The next level of contractor, class A3, are qualified on their equipment holding and contract/management record to undertake a larger volume of road works up to a value of US\$600,000.

of the thirteen contracts were awarded, and this only after negotiating the quoted rates to bring them to levels that were more realistic.

This failure of LBCs to rise to the challenge of competitive tendering obliged the DFR/MST programme to enter a third stage of widening those eligible to tender by including small equipment-based contractors (ECBs), referred to as A4 contractors as well as LBCs. Convinced of the importance of encouraging the labour-based approaches to enhance the livelihood impact of the works, the programme instituted a 10% margin of preference for LBCs to encourage them to compete for work against their small equipment based competitors. This financial preference enabled LBCs win contracts if their bids were up to 10% more than that of the lowest A4 bidder. The effectiveness of this preference margin is illustrated in the analysis of Round 1 contracts in the table below:



DFR/MST

Damanko-Pibilla road Nkwanta District A4 contractor preparing a culvert deck

The table illustrates both positive and negative trends. On the positive side, if a LBC is prepared to bid, the table confirms that the preference margin is an effective means of favouring LBCs, since it doubles their chances of winning a contract. However, on the negative side, the ability of the preference margin to encourage LBCs to tender seems to be limited and geographically confined to the southern districts in Brong Ahafo and Volta Regions, where there are higher population densities and more commercialized rural economies.

TABLE 1: ANALYSIS OF ROUND 1 TENDERS BY CONTRACTOR TYPE

Note: The four LBC contracts awarded in Nanumba District fell outside financial preference margin, while the nine A4 contract awards were subject to this preference margin.

District/Region	No. of lots	Bids Submitted		Contracts Awarded	
		LBCs Class C	ECBs A4	LBCs Class C	ECBs A4
Nanumba, Northern	13	15	18	4	9
East Gonja, Northern	6	0	57	0	6
Saboba Cherepone, Northern	7	0	0	0	7
Yendi, Northern	7	0	0	0	7
Zabzugu Tatale, Northern	4	1	16	0	6
Atebubu, Brong Ahafo	7	3	84	1	6
Kete Krachi & Nkwanta, Volta	11	3	54	1	10
Sene, Brong Ahafo	7	12	58	4	3
Total excluding Nanumba	49	19	269	6	43
		7%	93%	12%	88%

CONCLUSIONS

Further discussion with the contractors that won the above contracts throws further light on these findings. Only two of the successful Class C contractors have remained pure labour-based contractors, four were jointly registered as A4/Class C contractors and had elected to bid under their Class C certificate. Similarly, four of the A4 contractors began their careers as Class C contractors and LBC training for them was an important entry point to the road contracting industry. We can therefore conclude that the majority of these LBCs have widened their technological choice by acquiring more equipment and registering as A4 equipment based contractors. Furthermore, two of LBCs have gone on to increase the size of their business by becoming A3 contractors capable of tendering for contracts worth up to

THE DECISION MAKING PROCESS FOR RURAL INFRASTRUCTURE DEVELOPMENT IN VIETNAM

By Ngo Duc Manh and Nguyen Tri Dung

Research to analyze decentralization and the political landscape, including governmental and elected body structures, within which local decisions are made for rural infrastructure development was carried out in Vietnam. The role of elected officials in the planning, budgeting and procurement processes of the rural infrastructure programmes/projects was analysed.

The Vietnamese decentralization experiences from a chronological point of view since the open-door policy came into effect in 1986 was reviewed. Existing regulations on decentralization in Vietnam address four aspects of the process:

- i. administrative decentralization: the delegation of power from one administrative level to another;
- ii. fiscal decentralization: the redistribution of intergovernmental fiscal responsibilities;
- iii. political decentralization: the division of decision making and planning power; and
- iv. investment decentralization: the authority of governments at central and local levels to decide on investment projects.

The research found planning and budgeting activities remain very much a “top-down” affair in most provinces. Planning and budgeting activities are viewed as a process of implementing

the planned investment of state resources, and not as a means of guiding and controlling private development/investment for the public interest. There appears to be little in the way of systematic input from citizens or indeed from lower levels of the local government system (communes have little say in the district planning process, districts have little say in the provincial planning process). In addition, there are hardly any regular mechanisms in place or tools available for ensuring a “bottom-up” approach to planning and budgeting.

With regard to procurement, prior to 1994 and the resumption of overseas development aid (ODA), there was no comprehensive open competitive bidding regulation. The establishment of modern procurement framework for public expenditure in Vietnam, including procurement plans, procurement methods, procurement procedures, bid evaluation based on the principles of competitive bidding, began with the first procurement review in 1994 and promulgation in 1996 of open competitive bidding as a key market mechanism for public expenditure. Despite some recent improvements, procurement procedures still fall short of best international practices. Monitoring of Vietnam’s public investment programmes shows that good practices reduce

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\$600,000, up from the \$250,000 upper limit of Class C or A4 contracts. This business cycle perspective shows that once trained LBCs do not remain static but diversify and grow, leaving a gap that needs to be replenished periodically by training others to sustain the rural employment goal of the labour based road contracting sector.

The above example illustrates the ways that the DFID-funded MSP has worked with DFR to mainstream LBCs into the normal contracting out of maintenance and road improvement works. By working closely with DFR staff that is sympathetic to the LBC sector, MST has demonstrated that LBCs can compete with EBCs, and more importantly the role that LBC training plays as an entry point to the road contracting industry.

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costs and produce timely results, while poor practices lead to waste and delays and are often the cause for allegations of corruption and government inefficiency. The same benefits that accrue to donor-assisted projects in which procurement is handled well should be extended to all state-funded project procurement.

The research report highlights the fact that the role of elected officials as specified in regulatory documents and that in reality do not always converge. Detailed examination of practices through field trips to three provinces (Binh Phuoc, Nghe An and Thai Nguyen) show two different situations of rural infrastructure development projects under the two main sources of capital, state-funded and donor-funded. Field work also points out four reasons for the modest role of elected officials in the current planning, budgeting and procurement processes, including (i) the weak and loose organization of the elected bodies at local levels, (ii) the weak capacity of the deputies of the People's Council, (iii) the inadequate working conditions for cadres at local governments, and (iv) the insufficient inputs and information provision for elected officials at local levels.

The implications of this analysis point to intervention in two broad areas. The first, technical assistance to strengthen local elected officials' capacity to enhance their role in the planning, budgeting, procurement and management of rural infrastructure development projects. And second, to address some of the on-the-ground problems and issues that presently constrain the ability of elected bodies to make significant contributions to poverty reduction and public services delivery in Vietnam.

CONCLUSION

This research draws a picture of the political landscape in Vietnam, including the government organization, the development of the decentralization process since the Doi Moi in 1986, as well as the legal framework for the planning, budgeting and procuring processes of rural infrastructure projects. The role of elected officials in rural infrastructure at local levels has also been made clear through field trips to selected provinces and districts picked up from the Northern, Central and Southern regions of Vietnam.

Within the scope of state budget, most of the projects supporting infrastructure development in poor and extremely difficult communes have been integrated into government's projects or programs, including the Programme on Socio- Economic Development in Extremely Difficult Mountainous and Remote Areas (abbreviated as Programme 135, approved in 1998), the National Programme on Hunger Eradication and Poverty Reduction for the period of 1998-2000 (HEPR Programme, or Programme 133, approved in 1998), and the Target National Programme on HEPR and Employment Creation in the period of 2001-2005 (Programme 143, in 2001). Their main objectives are to 'ensure poor communes have an access to essential infrastructure such as small scale irrigation systems, roads, electricity, schools, health centers, clean water, markets for stimulating socio-economic development and direct support to HEPR in the communes.

In addition to these programmes at local levels many provinces have built policies and projects on infrastructure development in poor communes and villages based on the local requirement for poverty reduction. Most of the investment costs for such programmes come from local budgets.

The donor community¹ in Vietnam has also built projects in different forms to develop infrastructure in poor and extremely difficult communes. The encouragement from and the creation of favorable conditions by central government and local authorities has attracted the hundreds of international economic and social organizations with high investment capital that support thousands of projects to build infrastructure in poor and extremely difficult communes. Technical assistance from the donor community has, in fact, been acting as a driver for investment in rural infrastructure and a complement for state-funded projects. Given the adequate management, accounting procedures and strict requirements of the donor, their investments seem more effective than those of state-funded investment projects.

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¹ World Bank, GTZ, EU, ADB, DFID, etc.

THE IMPACT OF CONSTRUCTING RURAL ROADS ON LIVELIHOODS IN ONE OF THE POOREST PROVINCES OF LAO PDR

By Chloë Pearce, ILO ASIST Asia Pacific (AP), Thailand

INTRODUCTION

In 2003, ILO ASIST-AP began collaboration with the Asian Development Bank (ADB) to assist the Government of Lao Peoples Democratic Republic (PDR) develop capacity for labour-based rural road construction under the ADB supported Shifting Cultivation Stabilization Pilot Project (SCSPP) in Houaphan Province.

As part of this project, the ADB financed the construction of two access roads in the province. Work was undertaken to upgrade the Nam Ven Road, which was a 34.2 km track from Ban Done to Ban Phiang, and to construct a new 20.4 km road from Ban Ham Tai to Ban Muang Sang. The works on both these roads were classified as new construction and were completed in July 2004.

The road construction was just one component of the ADB project, which was designed to be an integrated rural livelihoods development project. The project had five interrelated components (i) capacity building of relevant Government departments; (ii) project management; (iii) diversified sedentary farming development; (iv) village based development, and (v) rural infrastructure development. The last component was designed to support components three and four. The project objective was to reduce poverty, increase food production, reduce production and consumption of opium and preserve natural resources.

The SCSPP targeted the upland farmers who still practice slash and burn agriculture despite the growing population and resulting pressure on existing fallow land. These communities represent some of the poorest and most isolated in the country. Existing roads, trails and tracks were seldom accessible

throughout the year and villages were regularly isolated during the wet season when these access roads became impassable due to flooding and landslides. This isolation led to unremitting poverty amongst the upland communities. The poor households in the villages targeted by the ADB project were characterised by isolation, vulnerability to fluctuations in income that often occur from economic shocks, sickness and natural disaster and poor access to services and facilities such as health care, markets and schools. Improving access to transport and greater mobility opportunities can help address some of these issues.

BENEFITS OF IMPROVED RURAL ROAD ACCESS

Rural roads improve access to services such as schools, health care, markets and credit, etc. and other social benefits. Improved access also enhances people's economic and social lives by enabling them to visit other family members and friends located further away more easily and frequently. Other benefits from rural roads accrue from reduced travel and transport costs and employment created during construction.



ASIST Asia Pacific

Making rural travel easier

However, while the role of transport in relation to agricultural production and marketing is well understood, its contribution to the development of human and social development is also very important and sometimes less well defined.

While it is easy to measure the success of improved transport in terms of greater access to services (through reduced travel time, increased trip making, greater variety of services to access), there is a growing recognition of the importance of social trip making. Increasing people's social trip making can help in strengthening poor people against unexpected economic shocks and related vulnerability described above by helping to forge personal safety nets through increased contact with wider family members and friends who can be called upon in times of need.

ILO ASIST-AP designed and carried out an impact study to qualify the benefits resulting from improved access from the construction of these two all-weather roads. Baseline data was collected in early 2003. In December 2003, a first follow-up survey was conducted that took a 'snapshot' of life along the roads during construction. In August 2005, a final socio-economic survey took place that included interviews with households within a 5km zone around both roads, traffic counts at pre-designated stations, an origin/destination survey and a price survey.

CONCLUSION

The impact study analysed the data collected in 2005 against the baseline data generated in 2003 to see whether it is possible to show that the households and villages along the Nam Ham Road

and Nam Ven Road have benefited from greater access opportunities because of the road construction. The evident improvements to people's lives that can be inferred from the data are interconnected.

Household Possessions: Data from 2005 showed a clear increase in the number of households who now own some form of motorised transport; either motorbikes or hand-tractors. Motorbike ownership increased by over 325% along the Nam Ham Road and by roughly 400% along the Nam Ven Road. Hand-tractors increased by 750% along the Nam Ham Road and by 1,100% along the Nam Ven Road.

The availability of loans and credit through the SCSPP must have contributed to the increase in ownership, coupled with the presence of an all-weather road on which to travel. The increase in vehicle ownership has enabled people to become more mobile, both the motorbikes and hand-tractors have taken away some of the burden of people having to physically load their produce on their backs and transport it from field to village to market.

Household Income: Household incomes also rose sharply, which can be attributed to the SCSPP projects efforts to encourage people to move away from the traditional slash and burn methods to the more sustainable and higher yielding shifting cultivation techniques and crop diversification. Annual household income in agriculture along the Nam Ham Road increased by 1,011% and livestock earnings by 98%. Along the Nam Ven Road, agriculture saw a 635% increase, while there was a 45% increase in livestock earnings. However, households would not have been able

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Infrastructure development in rural areas has improved and has made enormous progress compared to previous years. The policy mechanism on planning, budgeting and procurement for all these rural infrastructure projects has also been changed with strong decentralization and more control given to local institutions, especially commune, authorities. However, field trips to the localities show that elected officials (People's Councils at all levels) still play a very modest role in the preparation, implementation and supervision of rural infrastructure projects. Technical assistance to enhance this and develop the capacity to address on-the-ground problems would make significant contributions to poverty reduction and public services delivery in Vietnam and is of importance for the socioeconomic development and poverty reduction in Vietnam in the coming years.



Weaving, an important income generating activity

to take advantage of increased crop production and livestock produce if they did not have the means or the way of transporting those crops and products to the market. The construction of the two roads has resulted in an increase in the frequency of traders trips to the villages to buy and sell products. In 2003, few households sold regularly to traders, mainly because few traders visited villages regularly; in some cases traders came once a year to buy produce at the source. The data in 2005 showed that traders were visiting the villages along and around the road much more frequently and buying regularly from villagers. This change in trade patterns appears have encouraged villagers to increase their production of agriculture, livestock produce, and weaving and textile products because they are now assured of a steady market in which to sell their goods. Whereas in the 2003 data weaving and textile production was not looked at as a separate household activity category but was included in the 'other' category, by 2005 its annual average income along both roads was greater than the 2003 total for the 'other' category and was considered an important household activity. The availability of loans and the creation of microfinance groups through the SCSPP benefited households in the areas, and weaving and textile production clearly grew in popularity becoming a profitable household business for women and girls to engage in. The development of this sector was also facilitated by traders being

able to visit villages and engage in buying and marketing what is produced. When asked directly, all the households interviewed along both roads agreed that their household income had increased in the past 12 months in part because of the increase in the number of traders buying directly.

Travel Times: Travel times to markets, towns, health and education facilities showed a marked decrease. This can be explained by the increase in personal motorbike ownership (of the 27 households' in the Nam Ham Road area regularly visiting Xamnu

market, the majority traveled by motorbike), the introduction of bus services that operate along both roads and the availability of trucks and pickups traveling along the roads that people could ride in. Because travel times have shortened, villagers are visiting markets more regularly and because of success in the agricultural and livelihoods development component of the SCSPP, villagers also have more surpluses to sell.

The introduction of the bus service was mentioned by villagers from both roads as a valuable improvement to their daily lives. Many households stated that the ease of travel that now exists meant that they sought medical treatment sooner than they would have done prior to the road construction. This is an important change for the villagers. Research shows that in many poor and isolated rural communities, people seek medical treatment at the last possible moment. Usually when they are unable to work any more or the illness has progressed to a bad state. This delay in seeking medical treatment is not only because people are unable to afford to visit a doctor and/or buy medication but also because travel to medical facilities is long and difficult as well as expensive. By providing an all-weather road plus the presence of a regular bus service as well as an increase in personal vehicle ownership, communities around these two roads visit medical facilities sooner than they would have previously. This has encouraged preventative health care and will ensure better health of households in the future.

The 2005 survey did not determine whether the roads had decreased children's travel times to schools. For the most part, schools in these areas are located within a village and travel occurs within and between villages. It was not possible from the data collected to say categorically that the roads had made journey times shorter for pupils. The presence however, of these two roads has potential to help address issues of absenteeism. Schools (and health facilities) that are located in remote areas with difficult road access have traditionally suffered from staff shortages and high levels of absenteeism. The ability of teachers and health staff to reach their work place and to get away easily and regularly encourages them to remain in often isolated areas for the duration of employment. In this case however, teacher and medical staff retention was not measured. In future analysis of these roads it would be worthwhile looking at employment records to see if the roads have indeed had an effect on staffing levels in schools and health facilities.

Verbatim evidence shows that people's lives have improved a great deal since the roads were built. Comments centre on the ease of travel, the increase in spare time now that travel times have reduced. The presence of an affordable bus service has enabled people to travel with their produce to markets. The availability of personal transport has encouraged people to travel for social trips as well as economic ones. Many people commented on the ability to visit family more easily now. Children commented on the increased spare time because of quicker journeys. From these verbatim comments it is clear that the roads and transport opportunities that have come along have encouraged people to move about more frequently than before; a sign that the previous isolation of many of the communities is dropping away.

An evaluation by the ADB of its assistance to the agriculture and natural resources sector in Lao, also concluded that the access roads had "generated significant benefits." Reflecting the results of the ILO final survey, the ADB evaluation also concluded that the access roads

helped support the off-farm employment opportunities such as weaving. (ADB, 2005).

It is clear is that these roads were a necessary component of the SCSPP. As part of an integrated livelihoods project that aimed at reducing poverty by increasing households' income and these roads played an important part in supporting people's diversification. Without the roads the opportunity to purchase personal transport, the establishment of a bus service, and any increase in agricultural and non-agricultural production would have been lost through an inability to access markets to sell at. The roads have clearly opened up access and people are taking advantage of this. The project encouraged livelihood diversification, promoted community loans and provided a road on which people could transport themselves and their produce. With the increase in household income a greater sense of economic security will grow. Households will be better protected against sudden shocks that would have previously affected the household's ability to cope.

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ASIST Asia Pacific

Opening up access to villages

BITUMINOUS SURFACING OPTIONS FOR LOW VOLUME ROADS CONSTRUCTED BY LABOUR BASED METHODS

By Jon Hongve, Senior Advisor, ILO Technical Advisory Team Member, Limpopo Province, South Africa

Large scale labour-based road construction and rehabilitation programmes have historically focussed on gravel roads. However, recent research has shown that constructing to Low Volume Sealed Road (LVSR) standard in many cases can be economically justified based on life cycle cost analyses.

The Gundo Lashu programme in Limpopo Province, South Africa, which involves the use of labour-based approaches and small local contractors in road rehabilitation works, made the switch from gravel road rehabilitation to upgrading to LVSR (low volume sealed roads) standard. This was necessary due to lack of good quality wearing course gravel in the province and was done following an economic assessment of the available options. The purpose of this is to present a short abstract of a more detailed article available on the ILO ASIST web site, which aims at sharing information with other labour-based practitioners who may want to go in the same direction as the Gundo Lashu programme. The full article outlines in some detail all aspects of base construction or sealing operations and each procedure or product used with emphasis on salient points that the designers, supervisory staff and project managers must bear in mind.

LESSONS FROM EXPERIENCE

The shift from gravel road rehabilitation to upgrading to LVSR posed new challenges for the Gundo Lashu programme in terms of:

- Revising the construction techniques and work methods and re-training of the emerging contractors in the application of these;
- Educating the clients and consulting engineers on the design philosophy and principles as laid out in the SATCC (Southern Africa

Transport and Communications Commission) Guideline for Low Volume Sealed Roads;

- Adherence to strict, but achievable, specifications;
- Continuous research and development of labour friendly bituminous sealing options and construction techniques that remove or minimize the potential headaches and logistical problems for the inexperienced contractors.

Some findings and recommendations on sealing drawn from the work undertaken by the programme include:

- A bituminous seal requires a sound base in order to stand up under traffic. It is vital that the pavement layer(s) are of uniform thickness and adequately compacted. Appropriate use of a steel shutter system assists the contractors to achieve this as well as to achieve a smooth riding surface within the tolerances of the specifications.
- In order to reduce the chances of rejection of the works it is suggested that designers should strive to design around pavement layer(s) of 100 mm compacted thickness. This ensures that the



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Preparing the sub-base at Gundo Lashu

required compaction can easily be achieved and will in most cases give the required bearing capacity for a low volume road constructed on an already consolidated sub-base in the existing alignment.

- If added strength is needed, construction of ETB (emulsion treated bases) should be considered, alternatively topping up with a thin ETB layer. This will eliminate occurrence of base damage before sealing and obviate the need for a prime. An ETB layer will add costs, but will increase the durability and simplify maintenance of the road.

- For sealing, hot bitumen applications were tried, most notably the Otta Seal which uses graded gravels as aggregate. It was proven to be a durable seal suitable for secondary roads and can contribute to increased labour content on the project. However, using hot bitumen delivered by bitumen distributors has a number of potential disadvantages and problems on labour-based projects:

- Working with hot bitumen (130-140 degrees Celsius) is a potential health hazard, especially if the bitumen is to be cut back on site;

- Often occurring problems with the distributors cause huge logistical and managerial problems for the contractors and inferior quality of the seal;

- Up to one km of base has to be constructed before sealing can take place in order to get a reasonable price for the bitumen. If traffic cannot be kept completely off the road, the base can get severely damaged in the mean time and must be repaired at the expense of the contractor.

- In conjunction with CSIR (Council for Scientific and Industrial Research, South Africa) and the private sector, emulsion based seals were developed in order to enable the contractors to construct the seal at the same pace as the base is completed. The seal then serves as a curing membrane, it prevents base damages and improves the cash flow of the contractors.

Trials with the following emulsion based applications were carried out:

- Sand Seal
- Modified Otta Seal



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Spreading stone chips using a manual spreader

- Cold mix asphalt (generic)
- LBS Cold Mix Asphalt (proprietary)

All of these gave a satisfactory solution. Ultimately the choice of which application to use depends on the project circumstances i.e. funds available, pavement design, traffic, maintenance capability, etc. For the Gundo Lashu programme the LBS Asphalt is preferred on a natural or stabilised base due to the impermeability of the seal and superior riding surface. The Modified Otta Seal is considered a good alternative, but surface irregularities in the base may come through to the finished surface since the thickness of the seal cannot easily be varied to accommodate slight unevenness of the base as can be done with cold mix asphalts.

The full article can be found at: <http://www.ilo.org/public/english/employment/recon/eiip/publ/reference/general.htm#lbt>.

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ADVISORY SUPPORT INFORMATION SERVICES AND TRAINING (ASIST)

ASIST is a programme providing advisory support, information services and training on employment-intensive strategies and local resource utilisation in the provision of sustainable infrastructure. It is a programme of the Employment-Intensive Investment Branch (EMP/INVEST) of the International Labour Organisation (ILO).

The goal of the programme is to reduce poverty by mainstreaming employment-intensive strategies in the provision of infrastructure and services for improved and sustainable livelihoods and local economic development.

ASIST currently comprises two regional support programmes in Africa and Asia working within the framework of the EIIP. Their objective is to increase the use of cost-effective employment-intensive local resource based strategies in the provision of sustainable infrastructure, and in so doing create employment with fair working conditions for men and women.

The ASIST Bulletin is published by the International Labour Organisation Advisory Support, Information Services and Training (ILO/ASIST) Programme. It seeks to disseminate knowledge on theory, policy, practice and experience on or relevant to employment-intensive approaches for infrastructure delivery. The bulletin aims at nurturing and sharing knowledge and best practice to support the mainstream application of employment intensive approaches. Please send your feedback and contributions to the contacts below.

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