Sri Lanka: Reshaping Economic Geography

CONNECTING PEOPLE TO PROSPERITY



The World Bank

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The report operationalizes the framework developed in the 2009 edition of the World Development Report (WDR) "Reshaping Economic Geography". The 2009 WDR was launched in Sri Lanka in March 2009 and its main findings were discussed with leading policy makers including Finance Minister Sarath Amunugama and Central Bank Governor N. A. Cabraal. At that time, Sri Lankan policymakers, researchers, and entrepreneurs wanted to see the implications of international experience and the policy framework when applied to the realities facing the country. This report responds to these requests with the underlying work being guided by a panel of Sri Lankan advisors, consisting of Anura Ekanayake, Ramani Gunatilaka, Nalini Hennayake, Saman Kelegama, Willie Mendis, and H. N. Thenuwara. The views expressed in this report do not necessarily reflect the views of the panel members. Within the World Bank, Uwe Deichmann, Shanta Devarajan, Indermit Gill and Elizabeth King provided valuable guidance as peer reviewers. The team is particularly grateful to Naoko Ishii, World Bank Country Director for Sri Lanka for her support and guidance.

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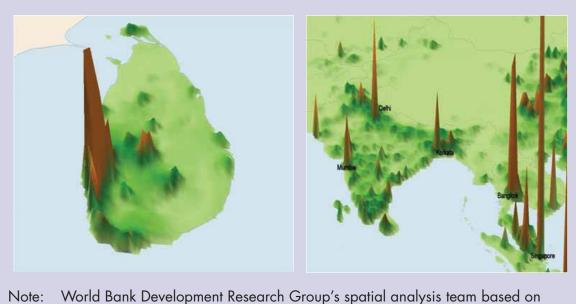
OVERVIEW: CONNECTING ALL SRI LANKANS TO PROSPERITY

Economic progress is accompanied by a fundamental spatial transformation where the economic landscapes of countries become increasingly uneven. The journey from low incomes to high incomes involves rising concentration of prosperity in a few places. Unbalanced growth is the norm, and has characterized the development experience of countries such as the United States and Japan, among the most prosperous in the world. And unbalanced growth is being repeated in China, India and other parts of the world that are prospering. At the same time, development can still be inclusive, as people who start their lives far from economic opportunity can benefit from the growing concentration of wealth in a few places. Connecting people to prosperity –is the principle behind economic integration policies that can help countries reap the benefits of both uneven growth and inclusive development. These are the main insights from the World Development Report 2009 "Reshaping Economic Geography (World Bank 2008).

These principles are important for Sri Lanka, which has laid the foundations for long term progress. Sri Lanka's rise into middle income has been accompanied by a rapid transformation in how global markets view the country. Between 1975 and 2005, manufactures shot up from 6 percent of national exports to 60 percent. This reshaped the country's economic geography—firms not farms now lead Sri Lanka's connectivity with the rest of the world. And these firms benefit from concentrating production close to Colombo, whose port moved 3.7 million containers in 2008. As a consequence Colombo and its neighboring areas have prospered. Western Province now contributes more than 50 percent to national GDP and is home to 37,000 industrial production units that employ 540,000 people and generate Rs. 527 billion in value added.

By concentrating production, Western Province has productivity and wages twice those in other provinces. While the rise of economic mountains around Colombo has been impressive, Colombo still has a long way to grow (figure 1). The economic density of

Figure 1: Impressive economic mountains around Colombo look like a small hill from a distance



sub-national GDP estimates.

Colombo is \$15 million per square kilometer. Compare this with \$73 million per square kilometer in Ho Chi Minh city, \$88 million per square kilometer in Bangkok, and \$269 million per square kilometer in Singapore—places that connect their countries to world markets.

Prosperity in Western Province has improved living standards for many Sri Lankans, including those who started their lives far from Colombo. More than 650,000 people who live in Colombo were born in other parts of the country. Many have moved from nearby Galle, Kalutara, and Kandy, and some from distant Jaffna. Others have been physically connected as national highways such as the A1 and A2 reduced transport costs and facilitated the flow of products across provinces.

While economic production has become concentrated, public policies have been remarkably successful in leveling social welfare. Poverty has come down in all provinces and education, basic healthcare, and basic infrastructure including water and sanitation are dispersed throughout the country. This has prepared Sri Lanka to take advantage of the next round of prosperity in the world and the region, and accelerate its journey through middle incomes. However, taking advantage of these opportunities requires that policies accelerate the pace of spatial transformations and connect more Sri Lankans with these opportunities. This report "Sri Lanka: Connecting People to Prosperity" provides insights for prioritizing these policies and associated investments, drawing on recently completed diagnostics and tailoring options to area specific challenges.

CONNECTING PEOPLE TO PROSPERITY

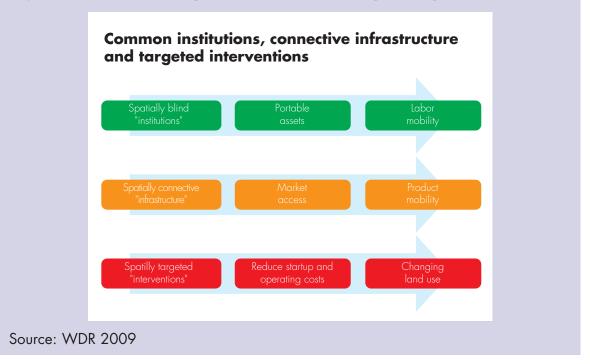
The World Development Report 2009: Reshaping Economic Geography provides a policy framework for territorial integration, highlighting that public policy should focus on increasing interactions between economically lagging areas and leading areas – and not be exclusively concerned with stimulating growth in places left behind by firms and workers. Reshaping Economic Geography highlights that enabling geographic mobility of labor and improving economic connectivity between lagging and leading areas are key ingredients for countries to gain from rapid economic progress and convergence in living standards across places. Which policies can help?

Policies that are "spatially blind" in design can have the spatially sharpest effects. These common institutions include progressive income tax policies, achieving national minimum standards in basic health and education indicators, and removal of barriers to labor mobility. In addition, "spatially connective" policies such as transport and communication improvements physically link lagging and leading areas. "Spatially targeted" interventions to stimulate economic development should be policy instruments of last resort, only to be used when factor mobility is weak due to internal divisions (figure 2). In these cases, interventions may be considered, but only after investing in information to identify sources of comparative advantage, and to amplify the benefits from spatially blind and connective policies. However in their current form, many policies in Sri Lanka have over-emphasized spatial targeting – what policies can jumpstart economies of the poorest areas?

Unfortunately these efforts have not generated the expected economic dividends. Consider the generous incentives offered by the Board of Investment to move economic activities outside Colombo. Analysis for this report shows that 80 percent of investments approved under Section 17 of the BOI Law and the 200 Garment Factory Programme took place in Western Province, not in lagging areas. And of the Rs. 44 billion worth of investments under "Nipayum Sri Lanka," a flagship program to support rural employment creation in lagging areas, Rs. 21 billion is used at the doorstep of Western Province, the North Western Province. Firms benefit from being close to other businesses and the international gateway, so industrial relocation policies end up hurting productivity and profitability. Similarly, efforts to stimulate rural development in lagging areas through regulations on use and transfer of agrarian land have been counterproductive. Not only have land development ordinances limited diversification in rural areas—they have also slowed the pace of poverty reduction because wages are lower in both farm and nonfarm activities. What are sharper instruments for territorial integration?

First, ensure that basic services are available everywhere. A middle-income Sri Lanka can be ambitious in defining what basic services include. The current challenge is not one of ensuring geographically equitable access, but improving the quality of services.

Figure 2: Taxonomy of territorial development policies



Education quality needs to be improved further in a system where only 70 percent of grade 8 students pass their first language and in Mathematics, and only 50 percent pass in English. And performance is worst in the Northern and Eastern provinces. Improving the quality and relevance of education should be of high importance because it will give children in lagging areas the ability to enter labor markets in dynamic places.

Research for this report show that the payoff to education is higher in Western Province and that facilitating labor mobility from other provinces will contribute to further reductions in national poverty. One way to improve education quality is to consider consolidation in places where enrollments are low and to use the cost savings for much needed teachinglearning materials. But Sri Lanka invests little in education, by international standards, and public investment in education also needs to be raised over time. While there is no doubt that tertiary education is an important pillar for national transformation, the analysis here shows that higher education subsidies disproportionately benefit rich families in Western Province. For spatial efficiency and connecting people to prosperity, private involvement in the delivery of tertiary education should be among the options.

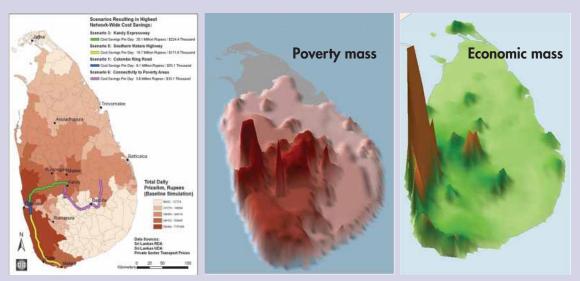
Now consider health services. Coverage is fairly uniform across provinces and by middle income country standards there is an excess of hospital beds. But services are underused in the network of hospitals run by provincial councils—people bypass lower level facilities to seek care at nationally run hospitals which are better resourced and provide a wider spectrum of services. This may be due to the non existence of a formal

referral system and the availability of free services throughout the system. Facilities in remote areas also find it difficult to attract specialist doctors, general medical officers and nurses as facilities in provincially managed hospitals are often inadequate. Furthermore, qualified personnel continue to be drawn to Western Province both due to availability of better resourced hospitals for health personnel and other non health related facilities, for example better opportunities for private sector income.

Second, improve infrastructure to connect lagging and leading areas. Transport costs within Sri Lanka are high by international standards. It costs \$2.90 per kilometer to move products, more than twice the \$1.25 in the United States. 'Bumpy' roads add to the cost of transport, and these costs are most pernicious along routes with high demand for transport services. From a national efficiency perspective, the challenge is to identify transport improvements that generate the highest aggregate reductions in transport costs. From a spatial equity perspective, the challenge is to improve connectivity in remote areas. How can transport policies manage these efficiency- equity tradeoffs?

The aggregate cost of 'bumpy' roads are felt the most along the national arteries such as the A1, A2, A3 and A4, where traffic volumes close to the boundary of Colombo city are as high as 60,000 to 80,000 vehicles per day. In contrast, typical traffic volumes on national roads in Uva Province are only between 1,500 and 2,500 vehicles per day. Improving transport quality along corridors with demonstrated potential is likely to improve the efficiency of the entire transport system and reduce island-wide

Figure 3: Strategic transport improvements can connect "mountains of poor people" to "peaks of prosperity"



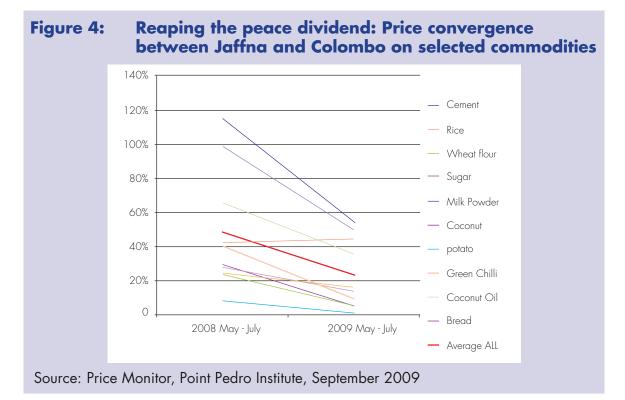
Source: Felkner et al (background paper) HIES data, 2006 World Bank DECRG based on sub-national GDP estimates transport costs. Not only does the corridor linking Kandy (and the Central Province) to Colombo carry the highest traffic volumes, it also physically connects a large mass of poor people with prosperity. Simulations employing spatially detailed data on the distribution of road infrastructure, traffic demand and transport costs also emphasize that transport improvements between Kandy and Colombo can generate large cost savings—nationally as well as for lagging areas in Uva, Eastern Province, and Northern Province. Improvements along the Colombo-Kandy Highway and the Southern Highway generate high economic returns because these transport corridors connect large markets – effectively connecting "mountains of poverty" to "peaks of prosperity" (figure 3). These investments are should be given priority among the national portfolio of transport improvements. What does this imply in terms of physical connectivity in isolated areas?

In addition to improving network efficiency, transport improvements may be needed for accessing basic services such as schools, health facilities, and local markets. While access to these services is important for people to improve welfare and make the most of local opportunities, the cost of providing, maintaining, and sustaining traditional transport services is higher in isolated areas. As low demand will discourage entry of formal transport providers whose services involve high fixed costs, the operational challenge will be to encourage Intermediate Modes of Transport (IMT) that can be operated and maintained by local residents. Vehicles such as bicycles, hand carts, motorcycles, power tillers and trailers, Ox carts, and tractors are commonly used to increase mobility in rural areas. Encouraging community involvement in providing and managing these services is a promising option that can enhance rural mobility.

Finally, target interventions in selected lagging areas: In some lagging areas, as in the North and the East, migration and interregional trade has been slow due to years of conflict and internal division. The dividends of peace already include faster movements of products and convergence of prices. Consider the Northern Province, in particular the Jaffna Peninsula, where an economic embargo was imposed in 1990 after the LTTE took military control of the area. The Government regained control of the Jaffna peninsula in 1995, but freight transport was only possibly by ships, usually from Trincomalee. While road connectivity between Jaffna and the rest of the country was temporarily reestablished when the A9 highway was re-opened after the ceasefire in 2002, the flow of goods was constrained by illegal taxation by the LTTE. And as armed conflict reemerged the A9 highway was once again closed in 2005.

Since the Government's military victory in 2009, the emergence of common institutions has opened up the A9 highway for goods traffic. Convoys of trucks, subject to security clearance by the Sri Lankan army, are being allowed to bring goods to and from the Jaffna peninsula. The result? Rapid price convergence between the Jaffna peninsula and the rest of the country – at the peak of the conflict in late 2007 the price of a bag of cement

was more than 4 times higher in Jaffna than in other parts of the country. According to the monthly Price Monitor carried out by the Point Pedro Institute of Development, the average price premium in Jaffna compared to Colombo on ten selected items was 48%, in the 3-month period May-July 2008. During May-July 2009 the average price premium for the same ten products had declined to 24 percent (figure 4).



As common institutions unify the country, there will be an increase in labor and product mobility in the medium term. But in the short term, these processes need to be complemented by strategic interventions to improve economic conditions in post conflict areas. However, rather than relocating existing industries from leading areas, making land more mobile—not across locations but across uses and users—is likely to accelerate structural transformation. Particularly important are institutional reforms that can improve the functioning of agrarian land markets. Land-development ordinances that regulate the use and transfer of land keep a larger proportion of people dependent on agriculture. They also keep people poorer because they earn less for their labor. Relaxing these ordinances is likely to raise agricultural incomes and accelerate poverty reduction and longer term transformation.

Targeted incentives to promote economic development work best when they are preceded by institutional reforms improving the fluidity of land markets. Most lagging areas are rich in natural endowments and private investors, such as Chemical Industries Colombo PLC (CIC) and Hayleys, are expanding activities in Eastern Province to make the most of the area's agronomic potential. Ongoing efforts to assist farmers in acquiring knowledge about technical advances and skills for raising farm output and productivity, will improve market linkages, as will introducing farmers to higher yielding rice varieties, alternative crops, better irrigation techniques, and use of organic fertilizers.

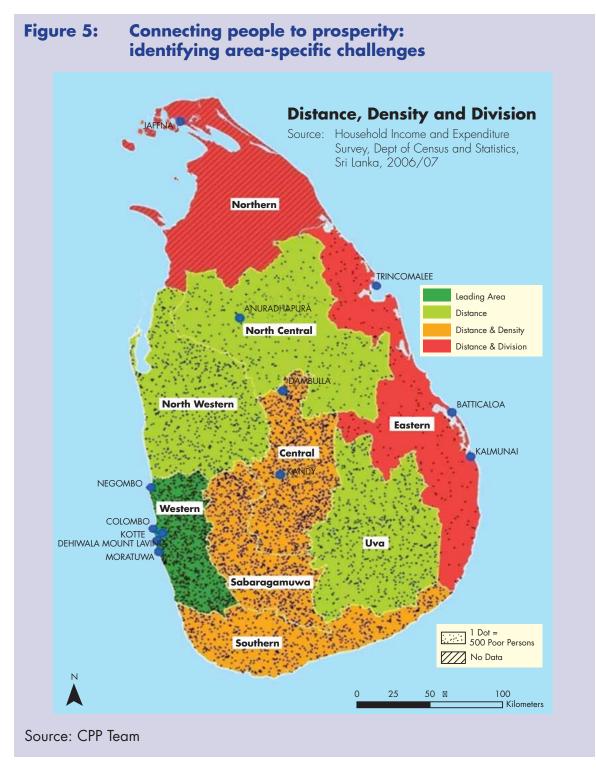
TAILORING POLICIES TO AREA-SPECIFIC CHALLENGES

To be most effective in connecting people to prosperity, policies need to be tailored to specific challenges facing different areas. The analysis in the report shows that improving basic service delivery everywhere is the bedrock of successful policy initiatives. In addition, infrastructure that physically connects lagging areas that are home to a large number of poor people with prosperous areas can stimulate trade and commerce. And in a few places, targeted interventions are needed to stimulate economic production in places left behind by market forces. What are the principles for setting priorities?

World Development Report 2009 develops a framework to help calibrate policies to the severity of area specific challenges, best summarized with poverty maps that show which places are poor and where most of the poor live. Often, the two are not the same, because the poor have the most reason to move from poor places. Recall the "Poverty Mountains" in figure 3 showing that many poor people live close to prosperity— in Western Province. With per capita expenditures of Rs. 6935 and poverty incidence of 8.2 percent, Western Province is the most prosperous place in the country, but also home to 16.8 percent of Sri Lanka's poor people. In contrast, Uva is the poorest province with per capita expenditures of Rs. 3879 and poverty incidence of 27 percent, but is home to 12.3 percent of Sri Lanka's poor.

Figure 5 shows where poor people live and prioritizes how poor people can be connected to prospering places. In fact, the density of poor people is highest in Western Province, not in lagging areas. Analysis for this report and the policy framework of WDR 2009 highlight the following priorities for connecting people to prosperity:

- Uva, North Central, and North Western provinces have a small share of the country's poor, relatively dispersed. Measures to enhance labor mobility should be the mainstay of connectivity policies. It does not make sense to place large-scale durable infrastructure in these places because investments would generate low economic returns. But by improving the quality of basic services, such as health and education, policies can facilitate migration and bring people closer to prosperity.
- Central, Sabaragamuwa, and Southern provinces are home to almost 50 percent of Sri Lanka's poor people, but there are few impediments to their mobility. Improving the quality of services is important to promote labor mobility, but it will



not be enough. Infrastructure improvements are needed to physically connect these places with markets in Western Province. Investments such as the Colombo-Kandy Expressway and Southern Matara Highway are likely to generate high economic returns by lowering transport costs, and are win-wins for rapid growth and inclusive development. • Eastern and Northern provinces do not have a large share of the country's poor, but domestic divisions have limited the movement of labor and exchange of products. Prices for food products have been converging, showing that common institutions can help integration. In the short term however, bringing prosperity to these areas will be critical for enhancing the peace dividend. But exploiting the area's economic potential should not be based on policies that push economic activities out of Western Province. Instead, it should be grounded in improving the use and transfer of agrarian land, with complementary targeted efforts to help farmers develop market linkages. And these efforts should be preceded by improvements in delivery and quality of basic public services.

Table 1 summarizes the policy options for connecting people to prosperity using a calibrated combination of common institutions and service delivery standards, connective infrastructure, and targeted interventions. These policies can help Sri Lanka accelerate its journey through middle income while sharing the benefits of growth across its provinces. What policymakers will notice is that economic prosperity will become further concentrated in a few places—but more people will be connected to prosperity.

Table 1:An instrument per dimension – priorities for connecting people to prosperity			
Provinces	North Central, North Western, Uva	Central, Sabaragamuwa, Southern	Eastern, Northern
Challenges	Sparsely populated lagging areas (economic distance)	Densely populated lagging areas (Economic distance and misplaced population densities)	Sparsely populated lagging areas with domestic divisions (Economic distance and internal divisions)
Policy priorities			
Spatially blind institutions	Improving health and education outcomes, safe water supply, and sanitation	Improving health and education outcomes, safe water supply, and sanitation	Improving health and education outcomes, safe water supply, and sanitation Improving the efficiency of land use and conversion
Spatially connective infrastructure		Interregional transport infrastructure - Improving connectivity with the Colombo metropolitan area	
Spatially targeted interventions			Incentives to agriculture and agro- based industry Amplify market linkages Don't force activities out of the Colombo metropolitan area

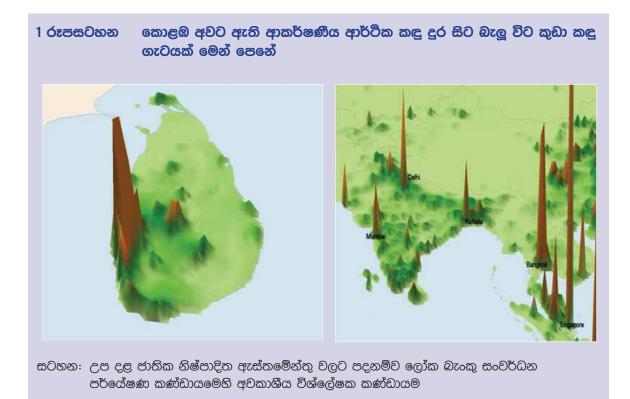
OVERVIEW | E 11

E 12 | CONNECTING PEOPLE TO PROSPERITY

සාරාංශය: සමෘද්ධිය කරා සියලු ශී ලාංකිකයන් ළඟා කරවීම

රටවල පවතින ආර්ථික පරිසරයෙහි අසමතුලිතභාවය දිනෙන් දින වර්ධනය වන තැන්හී ආර්ථික පුගතිය, මූලික අවකාශීය විතැන්වීමක් සමඟ සිදුවේ. පහළ ආදායම් තත්වයන් හී සිට ඉහළ ආදායම් තත්වයන් දක්වා වූ ගමන් මඟෙහි ස්ථාන කිහිපයක පමණක් සමෘද්ධිමත්භාවය සංකේන්දුණය වීම දැකගත හැකි වේ. අසමතුලිත ආර්ථික වර්ධනය සාමානෳ කුමය වන අතර, එය ලොව වඩාත්ම සමෘද්ධිමත් රටවල් අතර වන එක්සත් ජනපදය සහ ජපානය වැනි රටවල් සිය ආර්ථික වර්ධනය කරා යෑමේදී පෙන්නුම් කළ ලඤාණයක් විය. චීනය, ඉන්දියාව සහ සමෘද්ධිය කරා ළඟාවෙමින් සිටින ලෝකයේ අනෙකුත් රටවල් වලද අසමතුලිත ආර්ථික වර්ධනය නැවත නැවත සිදුවෙමින් පවතී. ඒ සමඟම, ආර්ථිකමය අවස්ථාවනට දුරස්ථව තම ජීවිකාව ආරම්භ කරන්නන්ට, ස්ථාන කිහිපයකට ධනය සංකේන්දුණය වීම ඉහළ යාමෙන් වාසි අත්කරගත හැකි බැවින් සංවර්ධනය තවදුරටත් අන්තර්ගත විය හැක. 'සමෘද්ධිය කරා ජනතාව ළඟා කරවීම' යන්න අසමතුලිත ආර්ථික වර්ධනය සහ අන්තර්ගත සංවර්ධනය යන දෙඅංශයෙහිම වාසි අත්කර ගැනීම සඳහා උපකාරී වන්නාවූ ආර්ථික ඒකාබද්ධතා පුතිපත්ති පසුපස ඇති මූලධර්මයයි. මේවා ''ආර්ථික පරිසරය පුතිසැකැසීම'' (ලෝක බැංකුව, 2008) යන මැයෙන් වූ ලෝක සංවර්ධන වාර්තාව 2009 මඟින් පිළිබිඹු වූ පුධාන කරුණු වේ.

දිගුකාලීන සංවර්ධනයක් සඳහා මුල පුරා ඇති ශී ලංකාව සඳහා මෙම පතිපත්ති වැදගත් වේ. ශී ලංකාව මධ් ආදායම් උපයන තත්වයට ළඟා වීම, ගෝලීය වෙළඳපොල ශී ලංකාව කෙරෙහි දක්වන ආකල්පයෙහි වේගවත් වෙනසක් සමඟින් සිදුවිය. 1975 සහ 2005 අතර කාලයේදී, නිෂ්පාදකයෝ ජාතික අපනයන පුමාණයන් සියයට 6 සිට සියයට 60 දක්වා පුමාණයකින් වේගයෙන් ඉහළ දැමූහ. මෙය රටෙහි ආර්ටික පරිසරය පුතිසැකැසීමට හේතු විය. වර්තමානයේදී ලෝකයේ අනෙකුත් රටවල් සමඟ ශී ලංකාව සම්බන්ධතාවය ගොඩනඟා ගෙන ඉදිරියට පියමනිනුයේ කෘෂිකර්මාන්තය තුළින් නොව වෙළඳ වහපාර මඟිනි. තවද මෙම වෙළඳ වහපාර, 2008 දී මිලියන 3.7 ක¹ බහාලුම් මෙහෙයවූ වරායක් සහිත කොළඹ නගරයට ආසන්නයේ සිදුවන නිෂ්පාදන සංකේන්දුණය තුළින් වාසි අත්කර ගනී. එහි පුතිඵලයක් ලෙස, කොළඹ නගරය සහ ඒ අවට පුදේශ සමෘද්ධිමත් භාවයට පත්ව ඇත. වර්තමානයේදී බස්නාහිර පළාත තුළ දළ ජාතික නිෂ්පාදිතයෙන් සියයට 50 කට වඩා පුමාණයක් නිපදවීම සිදුවන අතර 540,000 ක ජනතාවකට රැකියා සපයන කාර්මික නිෂ්පාදන ඒකක 37,000 ක් පිහිටා තිබෙන අතර ආකලිත වට්නාකමින් රුපියල් බිලියන 527 ක්² උපයයි.



නිෂ්පාදනය සංකේන්දුණය වීම අතින් අනෙකුත් පළාත් වලට වඩා බස්නාහිර පළාතෙහි ඵලදායීතාවය සහ වැටුප් දෙගුණයක් වේ. කොළඹ අවට ආර්ථික කඳු වල වර්ධනය ආකර්ෂණීය වූ අතරතුරදී, කොළඹ නගරය වර්ධනය කරා තවදුරටත් ගමන් කළ යුතු වේ (1 වන රූපසටහන). කොළඹ නගරයේ ආර්ථික ඝනත්වය වර්ග කිලෝමීටරයකට ඩොලර් මිලියන 15 ක් වේ. මෙම තත්වය ලෝක වෙළඳපොළ සමඟ තම රටවල් සම්බන්ධ කරන ස්ථාන වන හෝ චී මින් නගරයේ වර්ග කිලෝමීටරයට ඩොලර් මිලියන 73, බැංකොක් හි වර්ග කිලෝමීටරයට ඩොලර් මිලියන 88 සහ සිංගප්පූරුවෙහි වර්ග කිලෝමීටරයට ඩොලර් මිලියන 269 ලෙස වන ආර්ථික ඝනත්වය හා සසඳ බැලිය හැක.

කොළඹ නගරයට දුරස්ථව තම ජීවිත ආරම්භ කළ අය ද ඇතුලුව බොහෝ ශී ලාංකිකයන්ගේ ජීවන තතවයන් වැඩිදියුණු කිරීමට බස්නාහිර පළාතෙහි සමෘද්ධිමත්භාවය හේතු වී ඇත. කොළඹ ජීවත්වන්නන්ගෙන් 650,000 කට වැඩි පිරිසක් ඉපදී ඇත්තේ රටෙහි අනෙකුත් පුදේශවලය. බොහෝ දෙනෙක් ගාල්ල, කළුතර සහ මහනුවර යන පුදේශවලින් මෙන්ම දුරබැහැර යාපනය වැනි පුදේශ වලින් ද කොළඹට සංකුමණය වී තිබේ. Al සහ A2 වැනි ජාතික මට්ටමේ මහා මාර්ග පද්ධතිය හේතුවෙන් පුවාහන පිරිවැය අවම කොට පළාත් හරහා නිෂ්පාදනය ගලායෑම පහසු වී ඇති බැවින් අන් ජනතාවද කොළඹ නගරය හා භෞතික වශයෙන් සම්බන්ධ වී ඇත.

ආර්ථික නිෂ්පාදනය සංකේන්දුණය වී ඇති අතරතුරදී, සමාජ සුභසාධනය මට්ටම් කිරීමේදී රාජන පතිපත්ති සාර්ථකතවයට පත්ව තිබේ. දුගී භාවය සියලු පළාත් හි අවම වී ඇති අතර අධනාපනය, මූලික සෞඛන සේවා මෙන්ම ජලය සහ සනීපාරකෂක පහසුකම් වැනි මූලික යටිතල පහසුකම් ද රටපුරා වනාප්ත කරනු ලැබේ. මෙම තතවය ලෝකය සහ කලාපය තුළ ශී ලංකාව ආර්ථික සමෘද්ධියෙහි ඊළඟ පියවරෙහි වාසි ලබාගැනීමට සහ ශී ලංකාව සමෘද්ධිය කරා යන ගමන මධන ආදායම් හරහා වේගවත් කිරීම සඳහා සූදානම් කොට තිබේ. කෙසේ වෙතත්, මෙම අවස්ථාවන්ගෙන් ඵල නෙලා ගැනීමේදී තම පුතිත්ති මඟින් අවකාශීය පරිවර්තනයන් සිදුවීමේ වේගය කුමයෙන් වැඩි කිරීමට සහ වැඩි ශී ලාංකිකයන් පිරිසක් මෙම අවස්ථාවන් සමඟ සම්බන්ධ කිරීම අවශෘ කෙරේ. පාදේශීය වශයෙන් විශේෂිත වූ අභියෝගයනට මෑතදී සකස් කොට සම්පූර්ණ කරන ලද ගැටලු නිශ්චය කිරීම් සහ විසඳුම් විකල්පයන් කෙරෙහි අවධානය යොමු කරමින් ''ශී ලංකාව : සමෘද්ධිය කරා ජනතාව සම්බන්ධ කරවීම'' යන මැයෙන් වූ මෙම වාර්තාව ඉහත පුතිපත්ති සහ ඒ ආශිුත ආයෝජන පුමුබතාගතකරණය කිරීම සඳහා පෙර දැක්මක් සපයයි.

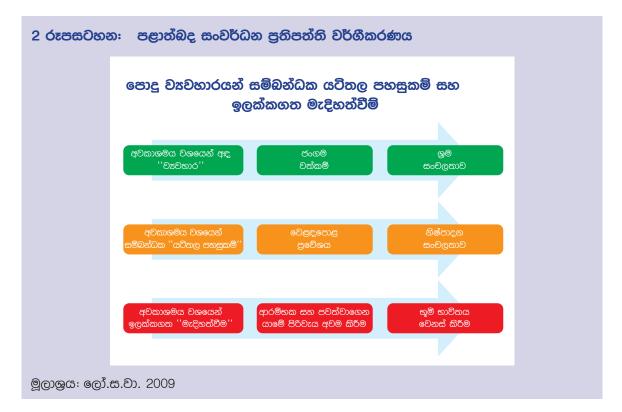
සමෘද්ධිය කරා ජනතාව සම්බන්ධ කරවීම

වෙළඳ වහපාර සහ සේවකයන් විසින් අතහැර දමන ලද පුදේශයන්හි ආර්ථික වර්ධනය වැඩි දියුණු කිරීමට උත්තේජ සැපයීම කෙරෙහි උනන්දු වීමට වඩා ආර්ථික වර්ධනය අතින් පසුගාමී සහ පුතිගාමී පුදේශ අතර සම්බන්ධතා වැඩිකර ගැනීම කෙරෙහි රාජන පුතිපත්තිය විසින් අවධානය යොමු කළ යුතු බව හුවා දක්වමින් 'ආර්ථික පරිසරය පුතිසැකසීම' යන මැයෙන් වූ 2009 ලෝක සංවර්ධන වාර්තාව පළාත්බද චීකාබද්ධතාවය සඳහා පුතිපත්ති රාමුවක් සපයයි.

'ආර්ථික පරිසරය පුතිසැකසීම' යන මෙම චාර්තාව වේගවත් ආර්ථික පුගතිය සහ විවිධ ස්ථාන ඔස්සේ ජීවන තතවයන් ඉහළ නැංවීමට අවශෘ සාධක චීකරාශී වීම යන මෙම හේතුවෙන් ඇතිවන තතවයන්ගෙ න් ඇතිවන ඵල නෙලා ගැනීමට අවශෘ කරනු ලබන පුධාන මූලදුවෘ ලෙස භූගෝලීය වශයෙන් ශුම සංචලතාවට ඉඩකඩ සැලසීම සහ පසුගාමී සහ පුතිගාමී සංවර්ධනයක් ඇති පුදේශ අතර ආර්ථිකමය වශයෙන් ඇති සම්බන්ධතාවය වැඩිදියුණු කිරීම අවධාරණය කරනු ලැබේ. මේ සඳහා කුමන පුතිපත්ති ආධාර විය හැකිද?

සැලසුම්කරණය අතින් ''අවකාශමය වශයෙන් අඳ'' පුතිපත්ති අවකාශමය වශයෙන් තියුණුම පුතිඵල ගෙන දිය හැක. මෙම සාමානෘ වෘවහාරයන්ට අනුකුම අයබදු පුතිපත්ති, මූලික සෞඛ්ෂ සහ අධ්යාපන සේවා දර්ශකයන්හි ජාතික මට්ටමින් අවශෘ කරන අවම තත්වයන් ළඟා කර ගැනීම සහ ශුම සංචලතාවයට ඇති බාධක මඟ හැරීම ඇතුළත් වේ. ඊට අමතරව පුවාහන සහ සන්නිවේදන වැඩිදියුණු වීම් වැනි ''අවකාශමය වශයෙන් සම්බන්ධක'' පුතිපත්ති සංවර්ධනය පසුගාමී සහ පුතිගාමී පුදේශ එකිනෙක සම්බන්ධ කරයි. අභෘන්තර විතජන හේතුවෙන් සාධක සංචලතාව දුර්වල වන විටදී පමණක් භාවිතා කිරීම සඳහා ආර්ථික සංවර්ධනය සඳහා උත්තේජ සැපයීමට ''අවකාශමය ලෙස ඉලක්කගත'' මැදිහත්වීම් අවසාන තුරුම්පුව ලෙස භාවිතා කළ හැකි පුතිපත්තිමය කුමවේදයන් විය යුතු ය (2 වන රූපසටහන). මෙම අවස්ථාවලදී, මැදිහත්වීම් සැලකීමට භාජනය වීමට ඉඩ ඇත්තේ සංසන්දනාත්මක වාසි අත්වන මූලාශුයන් හඳුනාගැනීමට අවශෘ කරන තොරතුරු පිළිබඳ සොයා බැලීමෙන් අනතුරුව සහ අවකාශමය ලෙස අඳ සහ සම්බන්ධක පුතිපත්ති වලින් අත්වන වාසි පුළුල් කිරීමට පමණි. කෙසේ වෙතත්, මේවායේ වර්තමාන ස්වරූපය අනුව, ශී ලංකාවේ බොහෝ පුතිපත්තීන් හී අධික ලෙස අවධානයට යොමුකළ අවකාශමය ලෙස ඉලක්කගත කිරීමේ ස්වරූපයක් දැකගත හැකිවේ. දුගී බව වැඩිම පුදේශයන්නි ආර්ථිකය වර්ධනය කිරීමට ජවයෙන් යුතු ආරම්භයක් ලබාදිය හැකි වන්නේ කුමන පුතිපත්ති වලට ද?

චනෙත් අවසනාවන්ත ලෙස මෙම පුයත්නයන් අපේක්ෂිත ආර්ථික ලාභාංශ උත්පාදනය කිරීමට අසමත් වී ඇත. කොළඹින් බැහැරව ආර්ථික කටයුතු සිදුකිරීම සඳහා ආයෝජන මණ්ඩලය විසින් ලබාදෙනු ලබන පරිතතාගශීලී දිරිදීමනා පිළිබඳව අවධානය මදකට යොමු කිරීම වැදගත් වේ. මෙම වාර්තාවෙහි විශ්ලේෂණය මඟින් පෙන්වා දෙනු ලබන පරිදි, ආයෝජන මණ්ඩල නීතියෙහි 17 වන පරිච්ඡේදය යටතේ



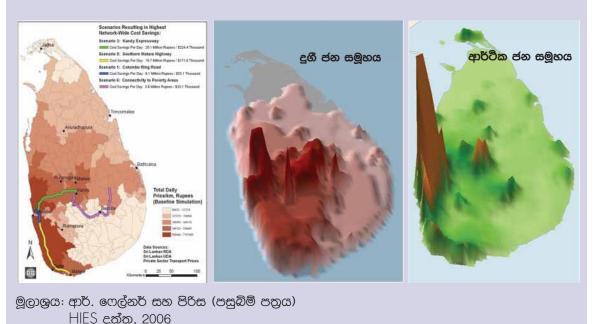
අනුමැතිය ලත් ආයෝජන වලින් සියයට 80 ක් වැය කර ඇත්තේ සහ ඇඟලුම් කර්මාන්ත 200 වැඩසටහන දියත් වූයේ සංවර්ධනය පසුගාමී පුදේශ වල නොව බස්නාහිර පළාත තුළය. තවද, සංවර්ධනය පසු ගාමී පුදේශයන්හි ගාමීය රැකියා උත්පාදනය සඳහා උපකාර කරන නියමු වනාපෘතියක් වන ''නිපැයුම් ශී ලංකා'' යටතේ වෙන් කෙරුණු රුපියල් බිලියන 44 ක ආයෝජන වලින් රුපියල් බිලියන 21 ක්ම භාවිතා කරනු ලබන්නේ බස්නාහිර පළාත ආසන්නයේම වන වයඹ පළාත සඳහාය. අනෙකුත් වනාපාර වලට සහ ජාතෘන්තර වෙළඳපොළට පුවිශ්ට වීමේ මාර්ගයන්ට ආසන්නයේ තිබීමෙන් වෙළඳ වනපාර වාසි ලබන බැවින් කාර්මික පුතිස්ථානගත කිරීමේ පුතිපත්ති, ඵලදායීත්වයට සහ ලාභදායී භාවයට හානි පමුණුවනු ඇත. එසේම, කෘෂිකාර්මික භූමි භාවිතය සහ පැවරීම පිළිබඳ රෙගුලාසි තුළින් සංවර්ධනය පසුගාමී පුදේශයන්හි ගුාමීය සංවර්ධනය උත්තේජනය කිරීමට දැරූ පුයත්න පුනර්ඵලදායී විය (Counter Productive). භූමි සංචර්ධන අණ පනත් ගුාමීය පුදේශයන් හි නානාංගකරණය සීමා කර ඇතිවා පමණක් නොව, ගොවිපළ සහ ගොවිපළවලින් බැහැර කටයුතු යන දෙඅංශයෙහිම වැටුප් පිරිවැය සාපේකෂ ලෙස අඩු බැවින් මෙම අණ පනත් දුගී භාවය අවම කරලීමේ වේගය ද අඩු කර ඇත. පළාත්බද ඒකාබද්ධතාවය සඳහා හේතුවන වඩා තියුණු කුමවේදයන් කවරේද?

පළමුව, සෑමතැන්හිම මූලික සේවා ලබාගත හැකි බව තහවුරු කළ යුතු වේ. මධා ආදායම් උපයන ශී ලංකාවට මූලික සේවා යන්නට කුමක් ඇතුළත් කළ යුතුද යන්න නිර්ණාය කිරීමේදී අපේක්ෂාසහගත විය හැක. වර්තමානයේ මුහුණ දෙනු ලබන අභියෝගය භූගෝලීය වශයෙන් සාධාරණීය ලෙස සම්පත් ළඟා කරගැනීම පිළිබඳ වූවක් නොව සේවාවන්හි ගුණාත්මක භාවය වැඩිදියුණු කිරීම පිළිබඳ වූවකි. 8 වන ශේණියේ අධාපනය හදාරන සිසුන්ගෙන් සියයට 70 ක් පමණක් තම මව්භාෂාව සහ ගණිතය විෂයය සමත්වන අතර සියයට 50 ක් පමණක් ඉංගීුසි භාෂා විෂයය සමත්වන අධානපන කුමයක අධානපනයෙහි ගුණාත්මක භාවය තවදුරටත් වර්ධනය කිරීම අවශා කෙරේ. තවද උතුරු සහ නැගෙනහිර පළාත්වල ශිෂායන්ගේ කාර්යසාධනය ඉතා දුර්වල වේ. සංවර්ධනය පසුගාමී පුදේශයන්හි ළමුනට සංවර්ධනය වේගවත් පුදේශයන්හි ශුම වෙළඳපොල වෙතට පුවිශ්ට වීමේ හැකියාව ලබා දෙනු ඇති බැවින් අධ්යාපනයේ ගුණාත්මකභාවය සහ අදාළත්වය ඉහළ නැංවීම ඉහළ පුමුබතාවයකින් සැලකිය යුතු වේ.

මෙම වාර්තාවට අදාළ පර්යේෂණ පෙන්වා දෙන පරිදි බස්නාහිර පළාතෙහි අධාපනය සඳහා දරන පිරිවැය අන් පළාත්වලට වඩා ඉහළ අගයක් ගන්නා අතර, අන් පළාත්වලින් සිදුවන ශුම සංචලතාවයට ඉඩකඩ සැලසීම ජාතික දරිදතාවය තවදුරටත් අවම කරලීම සඳහා දායකතවයක් දක්වනු ඇත. අධාපනයෙහි ගුණාත්මකභාවය වර්ධනය කිරීමේ එක් මාර්ගයක් නම් පාසැල් අධාපනයට යොමුවීමේ පුමාණය අවම පුදේශ ඒකාබද්ධ කිරීම සහ අතහාවශූ ඉගෙනුම් - ඉගැන්වීම් උපකරණ සඳහා දරන වියදම අවම කිරීමේ තුම භාවිතය පිළිබඳ අවධානය යොමු කිරීමයි. නමුත් ජාතශන්තර මට්ටම් හා සසඳ බලන කළ ශී ලංකාව අධහපනය සඳහා අයෝජනය කරන්නේ අඩු මුදලක් වන අතර, කාලයත් සමඟ අධහපනය සඳහා දරන රාජ්‍ය ආයෝජන ද ඉහළ දැමීම අවශූ වේ. ජාතික මට්ටමේ වෙනසක් සඳහා තෘතීය අධහපනය ඉතා වැදගත් සාධකයක් වනවාට කිසිදු සැකයක් නොමැති අතර, මෙහි දැක්වෙන විශ්ලේෂණයට අනුව, උසස් අධහපනයේ පතිලාභ විෂමානුපාතිකව භක්ති විඳිනු ලබන්නේ බස්නාහිර පළාතෙහි පොහොසත් පවුල් විසිනි. අවකාශමය කාර්යකෂමතාව සහ සමෘද්ධිය කරා ජනතාව සම්බන්ධ කරවීමේදී විකල්පයන් අතර තෘතීය අධහපනය ලබාදීමේ දී පෞද්ගලික අංශයේ මැදිහත්වීම ද ඇතුළත් විය යුතු වේ.

මීළඟට සෞඛත සේවාවන්හි තතවය දෙස අවධානය යොමු කරන්න. සෞඛත සේවා ආවරණය දෙස බැලූ කල චිය පළාත් හරහා ඉතා අල්ප වශයෙන් සමාන වතාපෘතියක් පෙන්නුම් කරන අතර මධත ආදායම් ලබන රටවල් වල තතවය සමඟ සැසඳීමේදී රෝහල් ඇඳන් හි අතිරික්තයක් දක්නට ලැබේ. නමුත් පළාත් සභා මඟින් පාලනය වනු ලබන රෝහල් ජාලයෙහි සේවා අවභාවිතා වනු ලබන අතර, ජනතාව මෙම පහළ මට්ටමේ පහසුකම් ඉක්මවා යමින් වඩා හොඳ පහසුකම් සහිත මෙන්ම පුළුල් සේවාවක් සපයන මධතම ආණ්ඩුව මඟින් පාලනය කරනු ලබන රෝහල් කරා ඇදී යති. විධිමත් විශේෂඥ සේවා පද්ධතියක්

3 රූපසටහන: කුමෝපායික පුවාහන වර්ධනයන්ට "දුගී ජන සමූහයා" ව "සමෘද්ධියෙහි හිණිපෙත්" කරා සම්බන්ධ කළ හැක



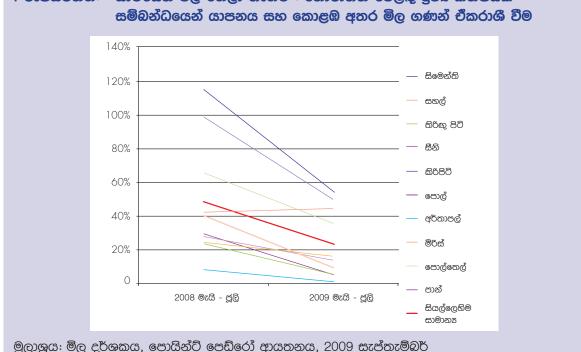
උප ජාතික දළ දේශීය නිෂ්පාදිත ඇස්තමේන්තු මත පදනම්ව ලෝක බැංකු DECRG

නොලැබෙන සහ සමස්ත සෞඛ් පද්ධතිය තුළම නොමිලේ සපයන සේවා තිබීම මේ තත්වයට හේතු වූවා විය හැක. දුෂ්කර පුදේශයන් හි ඇති අඩු පහසුකම් හේතුවෙන් ද විශේෂඥ වෛද්රීවරු, වෛද්ර නිලධාරීන් සහ හෙදියන්ගේ සේවය එම පුදේශ වලට ලබාගැනීමේ අපහසුතා ඇතිවනුයේ පළාත් සභා මඟින් පාලනය වන රෝහල්හි ඇති පහසුකම් බොහෝවිට අඩු වීමය. තවදුරටත් සෞඛ්ය බලධාරීන්ට වඩා හොඳ පහසුකම් සහිත රෝහල් පැවතීම සහ උදාහරණයක් ලෙස පෞද්ගලිකව ආදායම් ඉපයිය හැකි අවස්ථා වැඩි වශයෙන් තිබීම වැනි අනෙකුත් සෞඛ්ය නොවන පහසුකම් හේතුවෙන් සුදුසුකම් ලත් පුද්ගලයන් බස්නාහිර පළාතට චීකරාශී වීම තවදුරටත් සිදුවෙමින් පවතී.

දෙවනුව, සංවර්ධනය පසුගාමී සහ දියුණු පුදේශ චකිනෙක සම්බන්ධ කිරීමට යටිතල පහසුකම් දියුණු කිරීම. ජාතඝන්තර තතවයන්ට අනුව බලන කල ශී ලංකාවෙහි පුවාහන වියදම අධික වේ. නිෂ්පාදන චහා මෙහා ගෙන යාමට කිලෝමීටරයකට ඩොලර් 2.90 ක මුදලක් මෙහිදී වැයවන විට ඒ සඳහා චක්සත් ජනපදයෙහි දී වැයවන්නේ චම මුදලින් අඩකටත් වඩා අඩුවෙන්, චනම් ඩොලර් 1.25 ක මුදලකි³. ගොඩැලි සහිත මාර්ග පුවාහන වියදම වැඩි කරන අතර, මෙම පිරිවැය පුවාහන සේවා සඳහා ඉහළ ඉල්ලුමක් ඇති ගමන් මාර්ග සඳහා දැඩි ලෙස අනර්ථකාරී වේ. ජාතික මට්ටමේ කාර්යකෂමතා කෝණයකින් බලන කල්හි, පවත්නා අභියෝගය වනුයේ පුවාහන පිරිවැයෙහි ඉහළම සමස්ත පහළ වැටීම් ඇති කරන පුවාහන අංශයේ වර්ධනයන් හඳුනා ගැනීමයි. අවකාශමය ලෙස සාධාරණ කෝණයකින් බලන කල්හි, පවත්නා අභියෝගය වනුයේ දුෂ්කර පුදේශ අතර සම්බන්ධතාවය වැඩිදියුණු කිරීමයි. පුවාහන පුතිපත්ති හට මෙම කාර්යකෂමතා-සාරණීය සමථයන් කළමණාකරණය කළ හැක්කේ කෙසේද ?

වාහන ගමනාගමනයේ පුමාණය අතින් බැලූ කළ, දිනකට වාහන 60,000 ත් 80,000 ත් අතර ඉහළ අගයක් ගන්නා කොළඹ නගර සීමාවට ආසන්නයේදී A1, A2, A3 සහ A4 යන ජාතික මට්ටමේ මහා මාර්ග හරහා ගොඩැලි සහිත මාර්ගයන්හි ගමනාගමනය සඳහා වන සමස්ත පිරිවැය වඩාත් දැනේ. ඊට පුතිවිරුද්ධව ඌව පළාතෙහි ජාතික තලයේ මහාමාර්ගයන්හි සාමානෳ වාහන ගමනාගමනය දිනකට වාහන 1,500 ත් 2,500 ත් අතර වේ. සංවර්ධනය කරා යොමුවන බවක් දිස්වන පුදේශයන්හි ගමනාගමනය සඳහා අවශා ගුණාත්මකභාවය වැඩිදියුණු කිරීම සමස්ත පුවාහන පද්ධතියෙහිම කාර්යකෂමතාවය ඉහළ නැංවීමට සහ දිවයින පුරා පුවාහන පිරිවැය අවම කිරීමට හේතු වන බව පෙනීමට තිබේ. කොළඹ සහ නුවර (මෙන්ම මධාම පළාත) සම්බන්ධ කරන මාර්ගය වැඩිම වාහන පුමාණයක් එහා මෙහා ගමන් කරන මාර්ගය වනවා සේම චය ඉතා විශාල දුගී ජනතාවක් ආර්ථික සමෘද්ධිය කරා සම්බන්ධ කරවයි. මාර්ගයන්හි යටිතල පහසුකම් ගමනාගමන ඉල්ලුම සහ පුවාහන පිරිවැය පිළිබඳව අවකාශමය වශයෙන් විස්තරාත්මක දත්ත ඇතුළත් අනුකරණයන් මඟින් ද නුවර සහ කොළඹ අතර පුවාහන අංශයේ සංවර්ධනයන්ට ජාතික මට්ටමෙන් මෙන්ම ඌව, නැගෙනහිර සහ උතුරු පළාත්වල සංවර්ධනය පසුගාමී පුදේශවලටද විශාල ලෙස පිරිවැය අවම කිරීමේ මාර්ග නිර්මාණය කළ හැක. කොළඹ-නුවර අධිවේගී මාර්ගය සහ දක්ෂිණ අධිවේගී මාර්ගයෙහි වැඩිදියුණු කිරීම් ඉහළ ආර්ථික පුතිලාභ උත්පාදනය කරනුයේ මෙම පුවාහන මහාමාර්ගයන් ඵලදායී අයුරින් `'දරිදුතා කඳු'' `'සමෘද්ධියේ උච්චස්ථානයන්'' වෙත සම්බන්ධ කරන විශාල වෙළඳපොළවල් හේතුවෙනි (3 වන රූපසටහන). පුවාහන අංශයෙහි සංවර්ධනයන් සඳහා රජයේ ආයෝජන වලදී මෙම ආයෝජනයන් සඳහා පුමුබතාවයක් දිය යුතු වේ. ''මෙය හුදෙකලා පුදේශයන් හි භෞතික වශයෙන් ඇසි සම්බන්ධතාවය පිළිබඳව කුමක් පෙන්නුම් කරන්නේද?''

පාලමය කාර්යකෂමතාවය වැඩිදියුණු කිරීමට අමතරව, පාසැල්, සෞඛෘ පහසුකම් සහ පාදේශීය වෙළඳපොළ වැනි මූලික සේවා ළඟා කර ගැනීම සඳහා පුවාහන අංශයේ සංවර්ධනයන් අවශෘ කරනු ඇත. මිනිසුන් හට සුභසාධනය වැඩිදියුණු කිරීමට සහ පුාදේශීය වශයෙන් ඇති අවස්ථාවන්ගෙන් උපරිම පුයෝජන ලබාගැනීමට මෙම සේවා වෙත ළඟාවීම වැදගත් වන අතරතුරදී, හුදෙකලා පුදේශවල සාම්පුදායික පුවාහන සේවා ලබාදීමට, නඩත්තු කිරීමට සහ ඒ සඳහා ආධාර කිරීමට වැඩි පිරිවැයක් දැරීමට සිදුවේ. පවතින අඩු ඉල්ලුම හේතුවෙන් ඉහළ ස්ථාවර පිරිවැය සහිත සේවා සපයන විධිමත් පුවාතන සේවා සපයන්නන් මෙම සේවා සැපයීම සඳහා ඉදිරිපත් වීම අධෛර්යමත් වීම කිරීම හේතුවෙන් මෙහෙයුම් අභියෝගය වනුයේ පාදේශීය පදිංචිකරුවන් විසින් මෙහෙයවා පවත්වාගෙන යා හැකි අතරමැදි



4 රූපසටහන: සාමයෙහි ඵල නෙලා ගැනීම : තෝරාගත් වෙළඳ දවන කිහිපයක්

පුවාහන කුම (IMT) සඳහා දිරිමත් කිරීමය. ගුාමීය පුදේශයන්හි සංචලතාවය ඉහළ නැංවීම සඳහා පාපැදි, අත් කරත්ත, යතුරු පැදි සහ ටේලර්, ගොන් කරත්ත සහ ටැක්ටර් වැනි වාහන භාවිතා කිරීම සාමානූ ලකෂණයකි. ගුාමීය සංචලතාව වැඩිදියුණු කළ හැකි මෙම සේවා සැපයීම සහ පවත්වාගෙන යාම සඳහා පුජාවෙහි දායකත්වය දිරිමත් කිරීම ඉතා ඵලදායී විකල්පයකි.

අවසන් වශයෙන් සංවර්ධනය පසුගාමී පුදේශයන්හි ඉලක්කගත මැදිහත්වීම් : වසර ගණනාවක් පුරා පැවැති ගැටුම්කාරී තත්වය සහ අභ්නන්තර වශයෙන් වූ බෙදීම් හේතුවෙන් උතුරු සහ නැගෙනහිර වැනි සංවර්ධනය පසුගාමී සමහර පුදේශයන්හි සංකුමණය සහ අන්තර්කලාපීය වෙළඳුම අඩාල වී තිබිණි. සාමයෙහි පුතිලාභ අතරට මේ වන විටත් නිෂ්පාදන වේගවත් ලෙස චහා මෙහා ගෙන යෑම සහ මිල ගණන් චීකරාශී වීම ඇතුළත් වී ඇත. චල්.ටී.ටී.ටී. ය හමුදා බලය අත්පත් කර ගැනීමෙන් පසු 1990 දී ආර්ථික සම්බාධක පනවන ලද උතුරු පළාතෙහි යාපනය අර්ධද්වීපයෙහි තත්වය දෙස සලකා බලන්න. 1995 දී නැවත රජය යාපන අර්ධද්වීපයෙහි බලය අත්පත් කර ගත්තද භාණ්ඩ පුවාහනය සිදුකළ හැකි වූයේ සාමාන¤යෙන් තිුකුණාමලයෙහි සිට නැව් මඟින් පමණි. 2002 සටන් විරාමයෙන් පසුව 🗛 මාර්ගය නැවත විවෘත කිරීමෙන් පසු යාපනය සහ රටෙහි අනෙකුත් පුදේශ අතර මාර්ග සම්බන්ධතාවය තාවකාලිකව පුතිස්ථාපනය වූ අතරතුර, එල්ට්ටීඊ ය විසින් පැනවූ නීතියට පටහැනි බදු හේතුවෙන් භාණ්ඩ චහා මෙහා පුවාහනය අඩාල වුණි. චසේම නැවත ගැටුම් ඇතිවීමෙන් පසු 2005 දී නැවතත් A9මාර්ගය වසා දැමුණි.

2009 වසරේදී රජය යුධමය ජයගුහණය ලබාගත් කල සිට සාමානෳ කටයුතු නිසි පරිදි සිදුවීම හේතුවෙන් A9 මාර්ගය හරහා භාණ්ඩ පුවාහනය අධික ලෙස සිදුවීමට මං විවර කොට ඇත. හමුදාව විසින් සිදුකරන සෝදිසි කිරීම්වලට යටත්ව ආරකෂාව යටතේ ටුක්රථ පෙළ වලට යාපන අර්ධද්වීපයෙහි සිට සහ ඒ වෙත භාණ්ඩ ගෙන යාමට සහ ගෙන ඒමට වර්තමානයේදී ඉඩකඩ ලැබී ඇත. මෙමඟින් ඇතිවූ පුතිඵලය කුමක්ද? 2007 අගභාගයේදී ගැටුම් උච්චස්ථානයකට පත්ව තිබූ අවස්ථාවේදී යාපනයේ සිමෙන්ති කොට්ටයක මිල දිවයිනෙහි අනෙක් පුදේශ වල මිල මෙන් 4 ගුණයක් වැඩි විය.

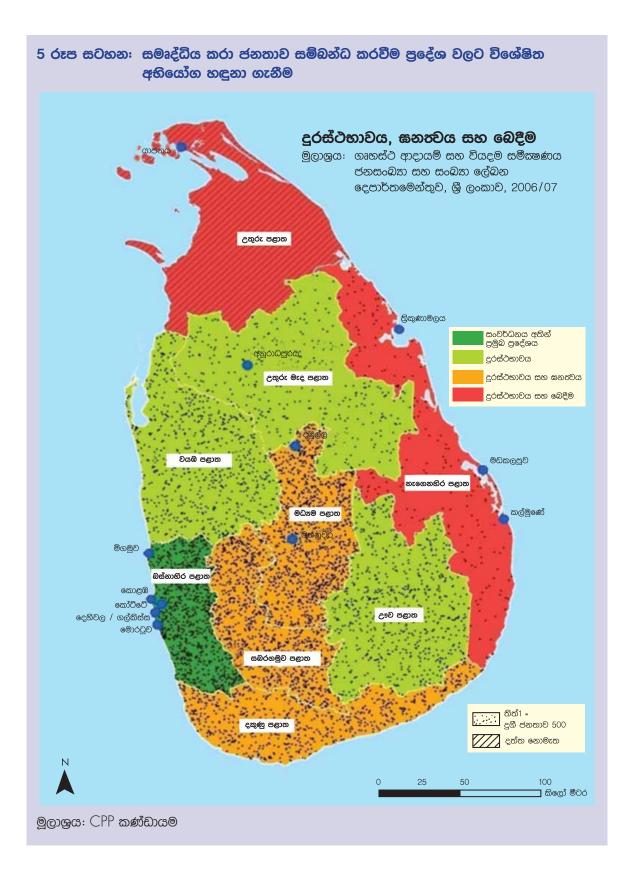
නමුත් වර්තමානයේදී යාපනය සහ දිවයිනෙහි අනෙක් පුදේශ අතර වේගවත් මිල ගණන් ඒකරාශී වීමක් දක්නට ලැබේ. සංවර්ධනය පිළිබඳ පොයින්ට් පෙඩ්රෝ ආයතනය විසින් මාසිකව සිදු කරගෙන යනු ලබන මිල අධීකෂකය අනුව 2008 මැයි - ජූලි අතර මාස 3ක කාලයකදී කොළඹට සාපේකෂව යාපනයේ තෝරාගත් අයිතම දහය ක දළ මිළ පාරිතෝෂිකය වූයේ 48% කි⁴. එම අයිතම දහය සඳහා 2009 මැයි -ජූලි අතර කාලය තුළ දළ මිල පාරිතෝෂිකය සියයට 24 දක්වා පහළ බැස ඇත. (4 වන රූප සටහන)

පොදු වෘවහාරයන් විසින් රට එකට එක් කිරීම හේතුවෙන් මධ්න කාලීනව ශුම සහ නිෂ්පාදන සංචලතාවයෙහි ඉහළ යාමක් ඇති වනු ඇත. නමුත් කෙටි කාලීනව, ගැටුම් වලින් පසු ගොඩනැඟෙන පුදේශයන්හී ආර්ථික තත්වයන් වර්ධනය කිරීම සඳහා මෙම කියාදාමයන් කුමෝපායික මැදිහත්වීම් මඟින් පෝෂණය කිරීම අවශෘ කෙරේ. කෙසේ වෙතත්, දැනට පවතින වෙළඳ වහපාර සංවර්ධනය අතින් දියුණු පුදේශ වලින් පුතිස්ථානගත කිරීමට වඩා ස්ථාන හරහා නොව භාවිතය සහ භාවිතා කරන්නන් හරහා භූමිය වඩා සංචල කිරීමෙන් වසුහමය පරිවර්තනය ඉහළ නැංවීමට දායක වන බව පෙනේ. විශේෂයෙන් වැදගත් වනුයේ කෘෂිකාර්මික භූමි වෙළඳ පොළ වල කියාකාරිත්වය වැඩි දියුණු කළ හැකි පුතිසංස්කරණයන්ය. භූමි භාවිතය සහ පැවරීම පිළිබඳ නීති අඩංගු භූමි සංවර්ධන අණපනත් මඟින් විශාල ජනසංඛනවක් කෘෂිකර්මය මත යැපෙන තත්වයෙහි තබයි. ජනතාව තම ශුමයට සරිලන පුමාණයට වඩා අඩුවෙන් ආදායම් උපයන බැවින් එම නීති මගින් ඔවුන්ව තව තවත් දුගී භාවයෙහිම රඳවා තබයි. මෙම අණපනත් හි නීතිමය තත්වයන් ලිහිල් කිරීම, කෘෂිකාර්මික ආදායම් ඉහළ දැමීමට. දුගී බව අවම කිරීමේ වේගය ඉහළ දැමීමට සහ දිගු කාලීන පරිවර්තනයන් සිදුවීමට හේතුවන බවක් පෙනෙන්නට තිබේ.

භූමි වෙළඳපොළ තරලතාව වැඩි දියුණු කිරීමේ ආයතනික පුතිසංස්කරණ මඟින් ආර්ථික සංවර්ධනය පුවර්ධනය සඳහා ඉලක්ක ගත දිරි දීමනා ඉදිරියට ගෙන යනු ලබන විටදී ඒවායෙහි කියාකාර්තවය උපරිම වේ. රසායනික කර්මාන්ත ශාලාව කොළඹ (සී.අයි.සී) (Chemicel Industries Colombo) සහ හේලීස් වැනි ස්වාභාවික උපපාදනයන් සහ පෞද්ගලික ආයෝජකයන් මඟින් බොහෝමයක් සංවර්ධනය පසුගාමී පුදේශ පොහොසත් වන අතර ඒවා නැගෙනහිර පළාත තුළ වන කෘෂි ආර්ථික හැකියාවෙන් උපරිම පුයෝජන ගැනීම සඳහා තම කියාකාර්තවය පූළුල් කරමින් සිටී. ගොවිපළ නිපැයුම් සහ ඵලදායිතාවය ඉහළ නැංවිම සඳහා අවශා වන තාකෂණික දැනුම සහ කුසලතා පිළිබඳ දැනුම ලබා ගැනීම සඳහා ගොවීන්ට උපකාර කිරීමට දැනට පවතින පුයත්න, වෙළඳපොළ සම්බන්ධතා මෙන්ම වැඩි ඵලදාවක් ඇති සහල් පුභේද, විකල්ප වගාවන්, වඩා හොඳ වාර්මාර්ග කුම සහ කාබනික පොහොර භාවිතයද වැඩි දියුණු කරනු ඇත.

එක් එක් පුදේශයට විශේෂිත අභියෝගයන් සඳහා පුතිපත්ති සම්පාදනය

සමෘද්ධි කරා ජනතාව සම්බන්ධ කරවීමේදී වඩාත් ඵලදායී වීම සඳහා විවිධ පුදේශ මුහුණ දෙන විශේෂිත වූ අභියෝගයන් සඳහා පුතිපත්ති සම්පාදනය අවශෳ කෙරේ. මෙම වාර්තාවෙහි දැක්වෙන විශ්ලේෂණය



පෙන්වා දෙන පරිදි සාර්ථක පුතිපත්තිමය පාරම්භකයන් සඳහා මූලික පදනම සෑම පුදේශයකටම මූලික සේවා සැපයුම වැඩි දියුණු කි්රීමයි. ඊට අමතරව, දුගී ජනතාව ඉතා විශාල සංඛනවක් ජීවත් වන සංවර්ධනය පසුගාමී පුදේශ සමෘද්ධිමත් පුදේශ සමඟ භෞතිකව සම්බන්ධ කරන යටිතල පහසුකම් වලට වෙළඳ හා වාණිජ කටයුතු සඳහා දිරීමත් කළ හැක. තවද ස්ථාන කිහිපයක, වෙළඳපොළ බලවේග විසින් අතහැර දමා තිබෙන පුදේශයන් හී ආර්ථික නිෂ්පාදනය උත්තේජනය කිරීම සඳහා ඉලක්කගත මැදිහත් වීම් අවශෘ කෙරේ. පුමුඛතා පෙළගැස්වීමේදි ඒ සඳහා අවශෘ කරන පුතිපත්ති කවරේද?

කවර පුදේශ දරිදුතාවයෙන් යුතුද යන්න සහ වැඩිම දුගී ජනතාවක් ජීවත්වන පුදේශ දක්වා ඇති දරිදතා සිතියම් මඟින් වඩාත්ම හොඳින් සාරාංශ ගත කොට ඇති පුදේශ අනුව විශේෂිත අභියෝග යන්ගේ බරපතල භාවය අනුව පුතිපත්ති කුමාංකනය කිරීම සඳහා උපකාර වන රාමුවක් 2009 ලෝක සංවර්ධන වාර්තාව ගොඩනඟයි. බොහෝවිට ඉහතින් දැක්වූ කරුණු දෙක චකිනෙකට සමාන නොවේ, මන්ද දරිදුතාවය ඇති පුදේශවලින් ඉවත් වීමට වැඩි වශයෙන්ම හේතු ඇත්තේ දුගී ජනයාටය. 3 වන රූප සටහනෙහි `` දරිදුතා කඳු'' මඟින් බස්නාහිර පළාතෙහි සමෘද්ධිමත් පුදේශ වලට ආසන්නයේ බොහෝ දුගී ජනතාව වාසය කරන බව පෙන්වා දී තිබූ අයුරු සිහියට නඟා ගන්න. රු. 6935ක් වූ ඒක පුද්ශල වියදමක් සහ සියයට 8.2ක දරිදතා ආපාතයක් ද සහිත බස්නාහිර පළාත රටෙහි සමෘද්ධිමත්ම පුදේශය වන නමුත් එය ශී ලංකාවෙහි දුගී ජනතාවගේ සියයට 16.8 කට සෙවණ සලසයි. මීට පුතිවිරුද්ධව, රු. 3879 ක ඒක පුද්ගල ව්යදමක් සහ සියයට 27ක දරිදතා ආපාතයක් සහිත ඌව පළාත දිවයිනෙහි දූගීම පළාත වන නමුත් එහි ජීවත් වනුයේ ශී ලංකාවේ දුගී ජනතාවගේ සියයට 12.3ක් පමණි.

5වන රූප සටහන දුගී ජනතාව ජීවත්වන පුදේශ පෙන්නුම් කරන අතර සමෘද්ධිය කරා ළඟාවෙමින් තිබෙන පුදේශ කරා දුගී ජනතාව කෙසේ සම්බන්ධ කරන්නේද යන්න පුමුඛතාගතකරණය කරයි. ඇත්ත වශයෙන්ම, දුගී ජන ඝනතවය අතින් සංවර්ධනය පසුගාමී පුදේශ නොව බස්නාහිර පළාත ඉදිරියෙන්ම සිටී. මෙම වාර්තාව සඳහා වන විශ්ලේෂණය සහ 2009 ලෝක සංවර්ධන වාර්තාවෙහි පුතිපත්තිමය රාමුව සමෘද්ධිය සඳහා ජනතාව සම්බන්ධ කිරීම සඳහා පහත දැක්වෙන පුමුඛතා ගෙනහැර දක්වයි.

- ඌව උතුරු මැද සහ වයඹ යන පළාත් හී (සාපේකෂ වශයෙන්) විසිරුණු රටෙහි දුගී ජනතාවගේ සුළු කොටසක් සිටී. ශුම සංචලතාව වැඩි දියුණු කිරීමේ පියවර, සම්බන්ධක පතිපත්තීන් හී පධාන සාධක විය යුතුවේ. ආයෝජන, අඩු ආර්ථික පතිලාභ උත්පාදනය කිරීමට ඉඩ ඇති බැව්න් මෙම පුදේශයන්හී දිගු කලක් පවතින මහා පරිමාණ යටිතල පහසුකම් ඇති කිරීමෙන් පලක් නොවේ. නමුත්, සෞඛා සහ අධාපනය වැනි මූලික සේවාවන්ගේ ගුණාත්මක භාවය වැඩි දියුණු කිරීම මඟින් සංකුමණයට පහසුකම සැලසීමට සහ ජනතාව සමෘද්ධිමත් පුදේශ ආසන්නයට ගෙන ඒමට පුතිපත්ති වලට හැකිවේ.
- මධ්‍යම සබරගමුව සහ දකුණු පළාත්හී ශ්‍රී ලංකාවෙහි දුගී ජනතාවගෙන් සියයට 50ක් පමණ ජීවත් වන නමුත් ඔවුන්ගේ සංචලතාවයට යට බාධා කිහිපයක් ඇත. ශ්‍රම සංචලතාවය පුවර්ධනය කිරීම සඳහා සේවා වන්හී ගුණාත්මක භාවය ඉහළ නැංවීම වැදගත් වන නමුත් එය පමණක් පුමාණවත් නොවනු ඇත. මෙම පුදේශ බස්නාහිර පළාතෙහි වෙළඳපොළවල් සමඟ භෞතිකව සම්බන්ධ කිරීම සඳහා යටිතල පහසුකම් වැඩි දියුණු කිරීම් අවශ්‍ය කෙරෙනු ඇත. කොළඹ - නුවර අධ්වේගී මාර්ගය සහ දක්ෂණ මාතර මහා මාර්ගය වැනි අයෝජන. පුවාහන පිරිවැය පහත හෙළීම මඟින් ඉහළ ආර්ථික පුතිලාභ උත්පාදනය කරන බවක් පෙනෙන්නට ඇති අතර, ඒවා වේගවත් ආර්ථික වර්ධනයට සහ අන්තර්ගත සංවර්ධනය සඳහා හේතු පාදක වේ.

1 වගුව: එක් මානයක් සඳහා වන කුමෝපාය - ජනතාව සමෘද්ධිය සමඟ සම්බන්ධ කරවීම සඳහා පුමුබතා					
පළාත්	උතුරු, මැද, වයඹ, ඌව	මධිපම, සබරගමුව, දකුණ	නැගෙනහිර, උතුර		
අතියෝග	ඉතා අඩු ජනගහනයක් සහිත සංවර්ධනය පසුග ාමී පුදේශ (ආර්ථික දුරස්ථතාව)	දැඩි ජනගහනයක් ඇති සංවර්ධනය පසුග ාමී පුදේශ (ආර්ථික දුරස්ථතාව සහ නියමාකාරයෙන් ස්ථානගත නොවූ ජන ඝනත්වයන්)	පුාදේශීය බෙදීම් සහිත, ඉතා අඩු ජනගහනයක් ඇති සංවර්ධනය පසුගාමි පුදේශ (ආර්ථික දුරස්ථතාව සහ අභ¤න්තර බෙදීම්)		
පුනිපත්තිමය පුමුබතා					
අවකාශීය වශයෙන් අද වෘවහාර	සෞඛතය සහ අධතාපන සේවා සෞඛතාරක්ෂිත ජල සැපයුම සහ සනීපාරකෂාව වැඩි දියුණු කිරීම	සෞඛනය සහ අධනාපන සේවා සෞඛනාරකෂිත ජල සැපයුම සහ සනීපාරකෂාව වැඩි දියුණු කිරීම	සෞඛනය සහ අධනාපන සේවා සෞඛනාරකෂිත භූමි භාවිතය සහ සනීපාරකෂාව වැඩි දියුණු කිරීම		
අවකාශීය වශයෙන් සම්බන්ධක යටිතල පහසුකම්		අන්තර් කලාපීය පුවාහන යටිතල පහසුකම් - කොළඹ නගරය සමඟ සම්බන්ධතාව වැඩි දියුණු කිරීම			
අවකාශීය වශයෙන් ඉලක්කගත මැදිහත්වීම්			කෘෂිකර්මාන්ත සඳහා දිරිදීමනා සහ කෘෂිකර්මය පදනම් වූ කර්මාන්ත වෙළඳපොළ සම්බන්ධතා විස්තාරණය කිරීම කොළඹ අගනගරයෙන් පිටට ආර්ථික කටයුතු තල්ලු නොකිරීම		

උතුරු සහ නැගෙනහිර පළාත්හී රටෙහි දුගී ජනයාගේ විශාල කොටසක් ජිවත් නොවන නමුත්, පාදේශීය වශයෙන් ඇති බෙදීම් ශුමය සංචලනය සහ නිෂ්පාදන හුවමාරුව සීමා කොට ඇත. පොදු වෘවහාරයන් ඒකාබද්ධතාවයට උපකාර විය හැකි බව පෙන්වා දෙමින් ආහාර නිෂ්පාදන සඳහා මිල ගණන් ඒකරාශී කරමින් තිබිණි. කෙසේ වෙතත් කෙට්කාලීනව, මෙම පුදේශ වෙත සමෘද්ධිය ලඟා කරවීම සාමයෙහි පතිලාභ බලාත්මක කිරීම සඳහා වැදගත් වනු ඇත. නමුත් පුදේශයෙහි ආර්ථික වශයෙන් ඇති හැකියාව පුයෝජනයට ගැනීම බස්නාහිර පළාතෙන් පිටතට ආර්ථික කටයුතු රැගෙන යන පුතිපත්ති මත පදනම් නොවිය යුතුවේ. ඒ වෙනුවට, එය ගොවීන් හට තම වෙළඳපොළ සම්බන්ධතා වර්ධනය කර ගැනීමට උපකාර වන්නාවූ පුශංසාත්මක ඉලක්කගත පුයත්න සහිතව, කෘෂිකාර්මික භූමි භාවිතය සහ පැවරීම වැඩි දියුණු කිරීම මත පදනම් විය යුතු වේ. තවද මෙම පුයත්නයන්, මූලික පොදු සේවා සැපයීමට සහ ඒවායෙහි ගුණාත්මක බවෙහි වර්ධනයන් මඟින් ඉදිරියට ගෙන යා යුතුවේ.

පොදු වෘවහාරයන් සහ සේවා බෙදා හැරීම් තතවයන්, සම්බන්ධක යටිතල පහසුකම් සහ ඉලක්ක ගත මැදිහත් වීම් හි කුමාංකිත සංයෝජනයක් භාවිතා කරමින් ජනතාව සමෘද්ධිය කරා සම්බන්ධ කරවීමේ පුත්පත්තිමය විකල්පයන් 1වන වගුව සාරාංශගත කරයි. පළාත් හරහා ආර්ථික වර්ධනයේ පුතිලාභ බෙදා හදා ගන්නා අතරතුර ශී ලංකාවට සමෘද්ධි කරා පිය නඟන ගමන මධා ආදායම් හරහා වේගවත් කර ගැනීමට මෙම පුතිපත්ති උදවු වේ. පුතිපත්ති සම්පාදකයන් අවබෝධ කරගන්නා කරුණ නම් ස්ථාන කිහිපයකට තවදුරටත් ආර්ථික සමෘද්ධිය සංකේන්දුණය වනු ඇති නමුත් සමෘද්ධිය සමඟ වැඩි පිරිසක් සම්බන්ධ වනු ඇත.

පසුසටහන්ඃ

- 1 බහාලුම් ඇසුරුම්ගත කිරීම පිළිබඳ අන්තර් ජාතික සඟරාවට අනුව, ලෝකයෙහි වරාය ශ්‍රෝණිගත කිරීම් අනුව, සැලකිය යුතු පුමාණයක නැවකින් තවත් නැවකට භාණ්ඩ මාරු කිරීම ඇතුළුව කොළඹ වරාය 2006 දී 34 වන ස්ථානයේ සිට 2008 දී 27 වන ස්ථානය දක්වා ඉහළට ගොස් තිබුණ. ලෝක ආර්ථික අර්බුදය හේතුවෙන් නැව් බඩු පුමාණයන් ඉතා තියුණු අන්දමින් සංකෝචනය වී ඇත. නමුත් දැන් වම තත්වයෙන් සෙමින් යථා තත්වයට පත්වෙමින් තිබේ.
- 2 වාර්ෂික කර්මාන්ත සංගණනය, 2003:2007 මිල ගණන්: සියයට 80ක කර්මාන්ත අංශයේ ආකලිත වටිනාකම්
- 3 ශ්‍රී ලංකා ඇස්තමේන්තු 2009 අපේල් මාසයේදී ලෝක බැංකුව මඟින් සිදුකරන ලද නැව් මඟින් ප්‍රවාහනය සඳහා මිල ගණන් සම්කෂණය මත පදනම් විය. එක්සත් ජනපද ඇස්තමේන්තු, කිලෝමිටරයකට ඩොලර් 1.25ක් පමණ හෝ සැතපුමකට ඩොලර් 2.00 ලෙස පොදු වනවහාරික නීතියෙහි සඳහන් වන එක්සත් ජනපදය පොදුවේ ප්‍රකාශිත බහාලුම් නැව්ගත කිරීමේ මිලගණන් මත පදනම් විය.
- 4 යාපනයේ දිස්තික්කයෙහි තිරුනෙල්වේලි වෙළඳපොළ කල්මුණේ (අම්පාර දිස්තික්කය), මඩකලපුව නගරය (මඩකලපු දිස්තික්කය), සහ වවුනියා නගරය යන පුදේශ වල සතියකට දෙවතාවක් මිල අධීක්ෂකය මිල ගණන් චීක් රැස් කරයි. මාසික දත්ත මෙම සතියක දෙවතාවක් සිදු කරන්නාවූ නිරීක්ෂණයන්ගේ සරල සාමාන්ෂ අගයයි. මෙහි දක්වා ඇති වෙළඳ දව් දහය, යාපනය මිලඟ ''ආනයනකරුවෙකු'' කරන වෙළඳ දව්ෂ බොහොමයක් ඇතුළත් වන්නකි. එබැවින් ඒකාබද්ධතාවය අපේක්ෂා කළ හැකි තත්වයකදී මෙම වෙළඳ දුව්ෂ වන සාපේක්ෂ වශයෙන් විශාල ලෙස මිල පහළ යාම අපේක්ෂා කළ හැකි විය. ඇත්ත වශයෙන්ම, දේශීය වෙළඳපෙළෙහි ''අධික සැපයුම'' හේතුවෙන් හුදකලා බවින් යුතු වූ කාල පරිච්ජේදයන් හිදී රටෙහි අනෙකුත් පුදේශ වලට වඩා යාපනය පුදේශයේ සමහරක් නිෂ්පාදන මිලෙන් අඩුවිය. එවැනි නිෂ්පාදනයන්ට උදහරණ නම් රතු ළුණු, ගෝවා සහ කැරට්ය.

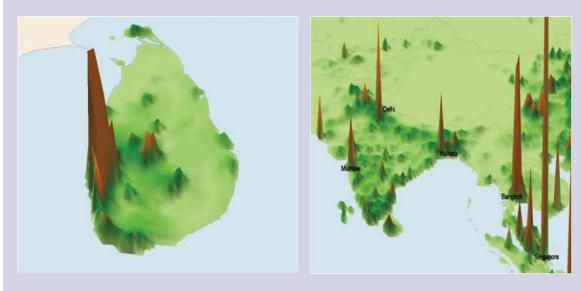
மீள்பார்வை: சகல இலங்கையரையும் வளமையை நோக்கி இணைத்தல்

நாடுகளின் பொருளாதார நிலக்காட்சி அதிகளவில் சமதளமற்று காணப்படும் அடிப்படை பிரதேசஞ் சார்ந்த மாற்றத்தோடே பொருளாதார முன்னேற்றமானது இடம்பெறுகின்றது. குறைந்த வருமானத்திலிருந்து உயர் வருமானத்தை நோக்கிய பயணமானது சில பிரதேசங்களில் மாத்திரம் உயர்ந்து செல்லும் வளமைமிக்க தன்மையின் மீது கவனக்குவிப்பு செய்யும் நிலையை கொண்டுள்ளது. சமசீரற்ற வளர்ச்சியே சாதாரண வழக்கமாக மாறியுள்ளதுடன் ஐக்கிய அமெரிக்கா, ஜப்பான் போன்ற நாடுகளின் அபிவிருத்தி அனுபவத்தையே உலகின் மிகவும் வளமைமிக்க நாடுகளாக எடுத்துக்காட்டுகின்றது. இவ்வாறான சமசீரற்ற வளர்ச்சி சீனா, இந்தியா மற்றும் ஏனைய வளமடைந்து வரும் நாடுகளிலும் இடம்பெறுகின்றது. அதேவேளை பொருளாதார வாய்ப்புகள் அரிதான நிலையில் வாழ்க்கையை ஆரம்பிக்கும் மக்கள், சில இடங்களில் மாத்திரமே அதிகரித்துசெல்லும் செல்வக்குவிப்பின் மூலமாக நன்மையடையும் வாய்ப்புகள் உள்ளதால், அபிவிருத்தியானது அனைவரும் அனைத்தும் உள்ளடங்கிய ஒன்றாக காணப்படலாம். சமசீரற்ற அபிவிருத்து மற்றும் சகலதும் உள்ளடங்கிய அபிவிருத்தி இரண்டின் மூலமாக நாடுகள் நன்மைகளை பெற்றுக்கொள்ள உதவிபுரியும் பொருளாதா ஒருங்கிணைபப்பு கொள்கைகளின் நியமமாக "வளமையை நோக்கி மக்களை இணைக்கல்" காணப்படுகின்றது. "பொருளாதார புவியியலை மீளவடிவமைத்தல்" என்ற 2009 உலக அபிவிருத்தி அறிக்கையின் பிரதான நோக்கமாகும் (உலக வங்கி 2008).

முன்னேற்றத்துக்கான நீண்டகால அத்திவாரங்களை கட்டியுள்ள இலங்கைக்கு இந்நியமங்கள் மிகவும் முக்கியமானவை. நடுத்தர வருமான நாடாக இலங்கையின் வளர்ச்சி, உலக சந்தைகள் நாட்டை நோக்குகின்றன தன்மையின் துரிதமான மாற்றத்தினை கொண்டுள்ளது. உற்பத்தியானது 1975ற்கும் 2005ற்குமிடையில் ஆறு சதவீத தேசிய ஏற்றுமதிகளிலிருந்து 60 சதவீதத்திற்கு அதிகரித்துள்ளது. நாட்டின் பொரளாதார புவியியலை இது மீளவடிவமைத்துள்ளது. உலகின் ஏனைய பாகங்களுடன் இலங்கைக்கு இணைப்பினை ஏற்படுத்துவது வாணிக நிறுவனங்களே தவிர பண்ணைகள் அல்ல. துறைமுகத்தினூடாக 2008ல் 3.7 மில்லியன் கொள்கலன்களை அனுப்பிய கொழும்பிற்கு அண்மையில் தங்களுடைய உற்பத்தி கவனக்குவிப்பை மேற்கொள்ளுகின்றமையால் இவ்வாணிகநிலையங்கள் நன்மையடைய முடியும். இதன் காரணமாக கொழும்பும் அதன் அயல்புறங்ககளும் வளமிக்கவையாக மாறியுள்ளன. தற்பொழுது மொத்த தேசிய உற்பத்திக்கு மேல் மாகாணமே 50 வீதத்திற்குமதிகமான பங்களிப்பினை செய்வதுடன் சுமார் 527 பில்லியன் ரூபாய் வருமானத்தையீட்டி 540,000 மக்களுக்கு வேலைவாய்ப்பளிக்கும் 37,000 கைத்தொழில் உற்பத்தி நிறுவனங்கள் கொண்ட நிலபரப்பாகும்.

உற்பத்தியில் கவனக்குவிப்பு செய்வதன் மூலமாக ஏனைய மாகாணங்களிலும் பார்க்க மேல் மாகாணமானத்தின் உற்பத்தியும் ஊதியமும் இரு மடங்கு அதிகமானதாகவுள்ளது. கொழும்பின் சூழ காணப்படும் பொருளாதார மலைகள் சாதகமான நிலைப்பாட்டை உருவாக்கும் தன்மை காணப்படுகின்ற

உரு 1: கொழும்பை சூழ உள்ள வியக்கதக்க பொருளாதார மலைகள் தொலைவில் சிறு குன்றுகளை போல காட்சி தருகின்றது



குறிப்பு: உபதேசிய மொத்த உள்நாட்டு உற்பத்தி மதிப்புகளின் அடிப்படையிலான உலக வங்கி அபிவிருத்தி குழுவின் இடஞ்சார்ந்த ஆய்வுகுழு

போதிலும் கொழும்பு வளர்ச்சியை நோக்கி செல்லும் பாதை அருகில் இல்லை (உரு.1). கொழும்பின் பொருளாதார செறிவு ஒரு சதுர கிலோ மீற்றருக்கு 15 மில்லியன் டொலர்களாகும். இதனை உலக சந்தையில் தங்களுடைய நாடுகளை இணைக்கும் பிரதேசங்களான ஹோீன் மின் நகரத்தின் சதுர கிலோ மீற்றருக்கான 37 மில்லியன் டொலர்கள், பங்கொக் நகரத்தின் சதுர கிலோ மீற்றருக்கான 88 மில்லியன் டொலர்கள் மற்றும் சிங்கபூர் நாட்டின் சதுர கிலோ மீற்றருக்கான 269 மில்லியன் டொலர்களுடனும் ஒப்பிட்டுப் பார்க்கவும்.

மேல் மாகாணத்தின் வளமைமிக்க தன்மையானது, கொழும்பிற்கு மிகவும் தொலைவில் வாழு்க்கையை ஆரம்பித்தவர்கள் உட்பட பல இலங்கையர்களின் வாழ்க்கை தரத்தை உயர்த்தியுள்ளது. பொழும்பு மாநகரத்தில் வசிக்கும் 650,000திற்கும் மேலான மக்கள் நாட்டின் ஏனைய பாகங்களிலேயே பிறந்துள்ளனர். பலர் அண்மையிலுள்ள காலி, களுத்தறை, கண்டி போன்ற பிரதேசங்களிலிருந்தும் சிலர் தொலைவிலிருக்கும் யாழ்ப்பாணம் போன்ற பிரதேசங்களிலிருந்தும் வந்து கொழும்பில் வசித்து வருகின்றனர். பிரயாண செலவை குறைத்து உற்பத்தி பொருட்கள் ஏனைய மாகாணங்களுக்கு சென்றடைய வழிவகுக்கும் A1 மற்றும் A2 பொன்ற தேசிய நெடுஞ்சாலைகள் மூலமாக ஏனையோர் இணைகின்றனர்.

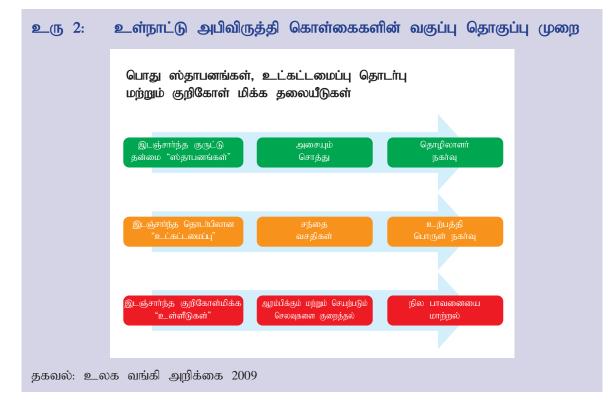
பொருளாதார உற்பத்தி கவனக்குவிப்பு மிக்க ஒன்றாக மாறியுள்ள அதேவேளை சமூக நலைனை நிலைநாட்டுவதில் பொது கொள்கைகள் குறிபிடதக்க வெற்றியைக் கண்டுள்ளது. கல்வி அடிப்படை வைத்திய சேவைகள, நீர், சுகாதாரம் உள்ளடங்கிய அடிப்படை உட்கட்டமைப்பு நாட்டின் சகல பாகங்களுக்கும் சென்றடைந்துள்ளது. இது உலகிலும் பிராந்தியத்திலும் காணப்படும் அடுத்தக்கட்ட வளங்களை தங்களுக்கு அனுகூலமாக பயன்படுத்த இலங்கையை தயார்படுத்தி நடுத்தர வருமானத்துக்கூடான பயணத்தின் வேகத்தை துரிதப்படுத்தியுள்ளது. எனினும், இவ்வாறான இடஞ்சார்ந்த மாற்றங்களை துரித வேகத்தில் அடைந்து அதிகளவிலான இலங்கையர்களை வாய்ப்புக்களுடன் இணைக்க இவ்வாறான சந்தர்ப்பங்களை அனுகூலமாக்குவதற்கு கொள்கைகள் அவசியப்படுகின்றன. "இலங்கை: வளமையை நோக்கி மக்களை இணைத்தல்" என்ற இவ்வறிக்கை பிரதேசஞ்சார்ந்த குறிபிட்ட சில சவால்களுக்கு முகங்கொடுக்க தேவையான அண்மையில் பூர்த்தி செய்யப்பட்ட புற ஆய்வுக்குறிகள் மற்றும் ஆக்க தேர்வுகளைக் கொண்டு மேற்குறிப்பிட்ட கொள்கைகளையும் அதனுடன் தொடர்புபட்ட முதலீடுகளையும் முன்னுரிமைபடுத்துவதற்கான உள்நோக்கங்களை எடுத்துரைக்கின்றது.

வளமையை நோக்கி மக்களை இணைத்தல

தேச ஒருங்கிணைப்பிற்கான கொள்கை சட்டகம் ஒன்றினை "உலக அவிவிருத்தி அறிக்கை 2009: பொருளாதாரப் புவியியலை மாற்றியமைத்தல்" வழங்குகின்றது. அத்துடன் நிறுவனங்கள் மற்றும் தொழிலாளர்களால் கைவிடப்பட்ட பிரதேசங்களில் வளர்ச்சியை அதிகரித்தல் என்பதில் மாத்திரம் முழுமையான கவனத்தையும் செலுத்தாது பொருளாதாரத்தில் பின்தங்கிய பிரதேசங்கள் மற்றும் முன்னேற்றமடைந்த பிரதேசங்களுக்கிடையில் காணப்படும் அதிகரித்த பிண்ணிய செயற்பாடுகளின் மீதும் பொதுக் கொள்கைகள் அக்கறை செலுத்த வேண்டும் என்பதையும் எடுத்துக்காட்டுகின்றது. நாடுகள் துரித கதியில் எருளாதார முன்னேற்றத்தை அடையவும் பிரதேசங்கள் மத்தியில் வாழ்க்கை தரம் ஒன்றோடொன்று இணைவதற்கும் தேவையான பிரதான காரணிகளாக தொழிலாளர் தொடர்பான புவியியல் நகர்வினை ஏற்படுத்தலும், மற்றும் பின்தங்கிய மற்றும் முன்னேற்றமடைந்த பிரதேசங்களுக்கிடையிலான பொருளாதார இணைப்பினை விருத்தி செய்தலுமாகும் என பொருளாதார புவியியலை மாற்றியமைத்தல் என்ற அறிக்கை சுட்டிக்காட்டுகின்றது. எவ்வாறான கொள்கைகள்

"இடஞ்சார்ந்த குருட்டுத்தன்மை" கொண்ட கொள்கைகள் உருவாக்கமானது இடஞ்சாரந்த கூர்மையான விளைவுகளை கொண்டுள்ளது. முன்னேற்றமான வருமான வரிக் கொள்கைகள், அடிப்படை சுகாதார மற்றும் கல்வி சுட்டிகளுக்கான தேசிய குறைந்தப்பட்ச தரங்களை அடைதல் மற்றும் தொழிலாளர் நகர்விற்கான தடைகளை அகற்றல் போன்றவையே இந்த பொது ஸ்தாபனங்கள் உள்ளடக்கும். அத்துடன் போக்குவரத்து மற்றும் தொலை தொடர்பு முன்னேற்றங்கள் போன்ற "இடஞ்சார்ந்த இணைப்பு" கொள்கைகள் பின்தங்கிய பிரதேசங்களையும் முன்னேற்றமடைந்த பிரதேசங்களையும் நேரடியாக இணைக்கும். பொருளாதார அபிவிருத்தியை அதிகரிக்கும் "இடஞ்சார்ந்த இலக்குகள்" தொடர்பான உள்ளீடுகள் இறுதி உபாயமாக கையாளப்பட வேண்டிய கொள்கை யுக்தியாகும். உள்ளக பிரவுகளின் காணமாக காரணிகளின் நகர்வு பலமற்று காணப்படும்பட்சத்தில் மாத்திரமே கடைசி உபாயமாக இதனை உபயோகிக்க வேண்டும் (உரு 2). இவ்வாறான நிலைகளில் ஒப்பீட்டு லாபக் காரணிகளை இனங்காணவும் மற்றும் இடஞ்சார்ந்த குருட்டுத்தன்மை மற்றும் இணைப்பு கொள்கைகள் மூலமான நன்மைகளை அதிகரிக்கவும் தகவல்களில் முதலீடு செய்யத பின்னரே உள்ளீடுகள் தொடர்பாக சிந்தித்தல் வேண்டும். எனினும், தற்போதைய நிலையில், இடஞ்சார்ந்த இலக்குகளை இலங்கையில் பல கொள்கைகள் அளவுக்கதிகமாகவே வலியுறுத்துகின்றன. வறுமை பிரதேசங்களில் பொருளாதாரத்தை உடனடியாக ஆரம்பிக்க எவ்வாறான கொள்கைகள் அவசியம்?

துர்அதிஷ்டவசமாக இம்முயற்சிகள் எதிர்பார்க்கப்பட்ட பொருளாதார நன்மைகளை அளிக்கவில்லை. கொழும்பிற்கு அப்பால் பொருளாதார நடவடிக்கைகளை நகர்த்த முதலீட்டுச்சபையினால் வழங்கப்பட்ட மானியங்களை கருத்தில் கொள்ளவும். 200 ஆடை கைத்தொழில் தொழிற்சாலைகள் திட்டத்தில் முதலீட்டுச்சபை சட்டத்தின் 17வது உறுப்பின் கீழ் அனுமதி வழங்கப்பட்ட 80 சதவீத முதலீடுகள் மேல் மாகாணத்தில் நடைப்பெற்றதேயன்றி பின்தங்கிய பிரதேசங்களில் இடம்பெறவில்லை என்பதை இவ்வறிக்கையின் ஆய்வு எடுத்துக் காட்டுகின்றது. அத்துடன் தொழில் வாய்ப்பினை உருவாக்க உதவிபுரியும் "நிபெயும் றீ லங்கா" என்ற முக்கிய திட்டத்தில் முதலீடு செய்யப்பட்ட 44 மில்லியன் ரூபா பணத்தொககையில் 21 மில்லியன் ரூபா மேல் மாகாணத்திலேயே உபயோகப்படுத்தப்பட்டது. ஏனைய வியாபாரங்களுக்கும், சர்வதேச நுழைவாயிலண்டைக்கும் நிறுவனங்கள் தங்களுடைய நடவடிக்கைகளை மேற்கொள்வதன் மூலமாக நன்மையடைவதன் காரணமாக தொழிற்சாலைகள் வேறு இடங்களுக்கு நகர்த்துவது தொடர்பான கொள்கைகள் உற்பத்தியையும் லாபத்தினையும்



பாதிக்கும். இதேபோன்று பின்தங்கிய பிரதேசங்களில் கிராம அபிவிருத்தியை அதிகரிக்கும் பொருட்டு விவசாய நிலங்களின் உபயோகம் மற்றும் கைமாற்றம் தொடர்பான சட்ட முயற்சிகள் பிரதிகூலமான ഖീണെപ്പകണെயേ ஏற்படுத்துகின்றன. நில அபிவிருத்தி சட்டங்கள் கிராம பிரதேசங்களில் மட்டுமல்லாமல் பண்ணையல்லாக பன்மைபடுத்தலை மட்டுப்படுத்தவது பண்ணை மர்நும் செயற்பாடுகள் இரண்டிலேயுமே மிகவும் குறைந்த ஊதியம் வழங்கப்படும் காரணத்தால் வறுமை குறைப்பு திட்டத்தின் முன்னேற்றத்தினையும் குறைத்துள்ளது. பிாகேச ஒருங்கிணைப்பிற்கான கூர்மைமிக்க யுத்திகள் எவை?

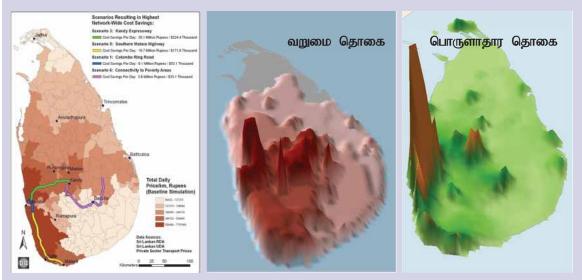
முதலில், அடிப்படை சேவைகள் சகல இடங்களிலும் காணப்படுகின்றது என்பததை உறுதி செய்தல் வேண்டும். அடிப்படை சேவைகள் எவைகளை உள்ளடக்க வேண்டும் என்பதை வரையறுப்பதில் நடுத்தர வருமான இலங்கை சிந்திக்கலாம். தற்பொழுது காணப்படும் சவாலானது இச்சேவைகள் புவியியல்ரீதியில் சமத்துவ அடிப்படையில் கிடைக்கப்பெறுகின்றனவா என்பதை உறுதி செய்வதல்ல, அனால் இச்சேவைகளின் தரத்தை உயர்த்துவதேயாகும். வகுப்பு எட்டு மாணவர்களில் 70 வீதமே தங்களது தாய்மொழியிலும் கணிதத்திலும் சித்தியடையும் அதேவேளை 50 சதவீதம் மாத்திரமே ஆங்கிலத்தில் சித்தியடைகின்ற கல்வி முறைமை, கல்வியின் தரம் மேலும் உயர்த்தப்பட வேண்டிய தேவை காணப்படுகின்றது. வடக்கு மற்றும் கிழக்கு பகுதியில் இது மேலும் குன்றிய நிலையில் காணப்படுவதால் கல்வியின் தரம் மற்றும் பொருத்தப்பாட்டினை அதிகரிப்பது மிகவுமட முக்கியமானதொன்றாக கருதப்பட வேண்டும். இது பின்தங்கிய பிரதேசங்களில் வாழும் பிள்ளைகள் பலம் வாய்ந்த இடங்களின் தொழிற்சந்தைகளினுள் பிரவேசிக்கும் ஆற்றலை அதிகரிக்கும்.

மேல் மாகாணங்களில் கல்விக்கான செலவீனங்கள் அதிகம் என்றும் ஏனைய மாகாணங்களிலிருந்து தொழிலாளர் நகர்ச்சிக்கு வழிவகுத்தல் தேசிய வருமையை மேலும் குறைக்குமென்றும் இவ்வறிக்கையின் ஆய்வுகள் காண்பிக்கின்றன. ஆள்சேர்ப்பு வீதம் குறைவாகவுள்ள இடங்களுக்கு ஒதுதக்கப்பட்ட தொகையை தொடர்ந்து பேணுவதில் கவனஞ் செலுத்தலும் அத்தொகையை மிகவும் அவசியமான கற்பித்தல் மற்றும் கற்றுக் கொள்வதற்குமான மூலங்களில் உபயோகித்தலும் கல்வி தரத்தை உயர்த்துவதற்கான ஒரு வழியாகும். ஆனால் சர்வதேச தரத்துடன் ஒப்பிட்டுப்பார்க்கையில், இலங்பை கல்விக்காக சிறிதளவே முதலீடு செய்கின்றது. அத்துடன் னாலத்திற்கு காலம் கல்விப்பான பொது முதலீடுகளும் அதிகரிக்கப்பட வேண்டும். தேசிய மாற்றத்திற்கு மூன்றாம் நிலைக் கல்வி ஓர் முக்கிய தூண் என்பதில் எவ்வித சந்தேகமும் இல்லாத போதிலும் உயர் கல்வி மானியங்கள் மேல் மாகாணத்திலுள்ள செல்வந்த குடும்பங்களுக்கே விகிதாசாரமற்ற ரீதியில் அனுகூலமாக காணப்படுகின்றன. இடஞ்சார்ந்த பயனுறுதிக்கும் வளமைமிக்க நிலைக்கு மக்களை இணைப்பதற்கும் காணப்படும் தெரிவுகளில் ஒன்றாக மூன்றாம் நிலைக் கல்வியை வழங்குவதில் தனியார்துறையின் ஈடுபாடும் உள்ளடக்கப்பட வேண்டும்.

தற்பொழுது சுகாதார சேவைகளை நோக்கவும், மாகாண மட்டங்களில் இது சகல இடங்களிலும் முறையாக உள்ளடக்கப்பட்டுள்ளது. அத்துடன் நடுத்தர வருமான நாடுகள் தரத்தில் வைத்தியசாலை படுக்கைகளை அளவுக்கதிகமாக கொண்டுள்ளது. ஆனால் மாகாண சபைகளால் நாடத்தப்படும் வைத்தியசாலைகள் வலையமைப்பினால் வழங்கப்படும் சேவைகளை மக்கள் பயன்படுத்திக் கொள்வது மிகவும் அறிதாகவே காணப்படுகின்றது. இதற்கு காரணம் கீழ்மட்ட வசதிகள் மற்றும் சேவைகளைவிட்டு மக்கள் சகல உபகரணங்கள், வளங்கள் கொண்டு பல்வகையான சேவைகளை வழங்கும் தேசிய மட்டத்தில் நடாத்தப்படும் வைத்தியசாலைகளை நாடுகின்றனர். ஓர் முறையான ஆலோசனை முறைமை இல்லாதமையும் மற்றும் இம்முறையில் இலவச சேவைகள் உள்ளமையும் இதற்கு காரணமாக அமையலாம். பின்தங்கிய பிரதேசங்களில் காணப்படும் வசதிகள் வைத்திய தாதிமர்களை பொது வைத்திய அதிகாரிகள் மற்றும் கவர்வதில் நிபணர்கள், சிக்கல்கள் காணப்படுகின்றன. மாகாண ரீதியில் முகாமை செய்யப்படும் வைத்தியசாலைகளில் வசதிகள் குறைவாகவிருப்பதே இதற்கு காரணமாகவுள்ளது. மேலும் உயர் வசதிகளும் வளங்களும் காணப்படும் வைத்தியசாலைகளினாலும் சுகாதாரத்துடன் தொடர்பற்ற ஏனைய வசதிகளினாலும் உதாரணமாக தனியார்துறை மூலம் வருமானமீட்டும் நல்ல வாய்ப்புகள் போன்றவற்றினாலும் தேர்ச்சிப்பெற்ற வைத்திய அதிகாரிகள் தொடாந்து மேல் மாகாணத்தினேயே விரும்புகின்றனர்.

இரண்டாவதாக, பின்தங்கிய மற்றும் முன்னேற்றமடைந்த பிரதேசங்களை இணைப்பதற்கான உட்கட்டமைப்பை கட்டியெழுப்பல். சர்வதேச தரத்துடன் ஒப்பிடுகையில் இலங்கையின் பொக்குவரத்து

உரு 3: போக்குவரத்து விருத்தி உபாயங்கள் "வறியமக்க மலைகளை" "வளமை மிகு சிகரங்களுடன்" இணைக்க வழிவகுக்கும்

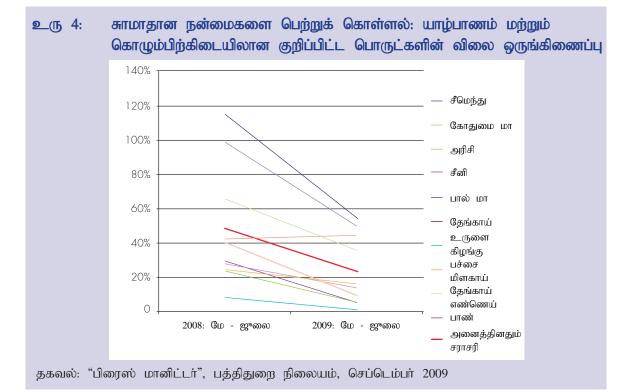


தகவல்: Felkner et al (பின்புல ஆவணம்), HIES தரவு 2006, உபதேசிய மொத்த உள்நாட்டு உற்பத்தி மதிப்புகளின் அடிப்படையிலான உலக வங்கி அபிவிருத்தி குழுவின் இடஞ்சார்ந்த ஆய்வுகுழு. செலவு அதிகரித்து காணப்படுகின்றது. ஐக்கிய அமெரிக்காவில் உற்பத்திகளை கொண்டு செல்வதற்கு ஒரு கிலோ மீற்றருக்கு செலவாகும் 1.25 டொலருடன் ஒப்பிடுகையில் இருமடகொங்கிற்கும் அதிகமாக இலங்கையில் 2.90 டொலராக காணப்படுகின்றது. "கரடு முரடான" பாதைகள் போக்குவரத்து செலவினை மேலும் கூட்டுச்செலவினை குறைக்க உதவும் போக்குவரத்து முன்னேற்ற விருத்திகளை இனங்காண்பது ஓர் சவாலாக அமையும். இடஞசார்ந்த ஒப்புரவு தோற்றத்தில், பின்தங்கிய பிரதேசங்களில் இணைப்பினை அபிவிருத்தி செய்வதே சவாலாக கருதப்படும். இப்பயனுறுதி மற்றும் சமநிலை வர்த்தகதன்மையை போக்குவரத்து கொள்கைகள் எவ்வாறு முகாமை செய்யலாம்?

கொழும்பு மாநாகர எல்லைகளில் போக்குவரத்து நெருக்கடியளவு கூடியது நாளுக்கு 60,000 முதல் 80,000 வாகனங்களாகவிருக்கும். A1, A2, A3 மற்றும் A4 தேசிய நெடுஞ்சாலைகளிலேயே "கரடு(மரடான" பாதைகளின் கூட்டுச்செலவு அதிகமாக உணரப்படுகின்றது. இதற்கு மாறாக ஊவா மாகாணத்தில் காணப்படும் தேசிய வீதிகளில் உதாரணமாக போக்குவரத்து நெருக்கடியளவு நாளுக்கு 1500ற்கும் 2500ற்குமிடையிலேயே காணப்படுகின்றது. அதன் நன்மைகளை வெளிக்காட்டும் வகையில் பாதைவழிகளில் போக்குவரதத்து தரத்தை உயர்த்துதல் முழு போக்குவரத்து ஒழுங்குமுறையின் பயனுறுதியை முன்னேற்றி நாடு முழுவதும் போக்குவரத்து செலவினை குறைக்கும். கண்டியை (மத்திய மாகாணம்) கொழும்புடன் இணைக்கும் வீதியே அதிகமான போக்குவரத்து நெருக்கடி அளவினை கொண்டுள்ளதோடு பாரிய தொகையிலான வறிய மக்களை வளமைமிக்க வாழுவுட்ன இணைக்கிறது. வீதி உட்கட்டமைப்பு பகிர்ந்தளிப்பு, போக்குவரத்து நெருக்கடி கேள்வி மற்றும் போக்குவரத்து செலவுகள் தொடர்பாக இடஞ்சார்ந்த விரிவான தகவல்களை உபயோகிப்பது போன்ற செயற்பாடு கண்டிக்கும் கொழும்பிற்குமிடையிலான போக்குவரத்து அபிவிருத்திகள் அதிகளவிலான செலவுகளை குறைக்கும் என்பதை எடுத்துரைக்கின்றது. இது தேசிய மட்டத்திலும் ஊவா மாகாணத்தின் பின்தங்கிய பிரதேசங்களிலும், கிழக்கு மாகாணம் மற்றும் வட மாகாணங்களுக்கும் பொருந்தும். "வறுமை மலைகளிலிருந்து" "வளமையின் சிகரங்களுக்கு" செயற்திறன்மிக்க ரீதியில் இணைத்தல் என்ற வகையில் போக்குவரத்து பாதைகள் பாரிய சந்தைகளுடன் இணைவதால் கொழும்பு-கண்டி நெடுஞ்சாலை மற்றும் தென் நெடுஞ்சாலை போன்றன உயர் பொருளாதார வரவுகளை உருவாக்குகின்றது (உரு.3). போக்குவரத்து அபிவிருத்திக்கான தேசிய பட்டியலில் இம்முதலீடுகளுக்கு முன்னரிமை வழங்கப்பட வேண்டும். கைவிடப்பட்ட பிரதேசங்களில் நேரடி இணைப்பு என்ற வகையில் இது எதனை உணர்த்துகின்றது?

மேலும் வலையமைப்பு பயனுறுதியை முன்னேற்றுவதற்கு அப்பால் பாடசாலைகள், வைத்திய வசதிகள், மற்றும் உள்நாட்டு சந்தைகள் போன்ற அடிப்படை சேவைகளை பெற்றுக்கொள்வதற்கும் போக்குவரத்து விருத்திகள் தேவைப்படுகின்றது. சமூக நலநன தெிகரிக்கவும் உள்ளக வாய்ப்புகளில் உச்சப் பயனை ஈட்டவும் மக்களுக்கு மேற்குறிப்பிட்ட சேவைகளை பெற்றுக்கொள்வது மிகம் அவசியமான அதேவேளை, பின்தங்கிய கைவிடப்பட்ட பிரதேசங்களில் போக்குவரத்து சேவைகளை வழங்குதல், பேணுதல் மற்றும் நிலைக்க செய்தல் போன்றவற்றுக்கான செலவு அதிகமானது. குறைந்த கேள்வியானது நிர்ணயிக்கப்பட்ட உயர் சேவைகளை கொண்ட முறையான போக்குவரத்து சேவை வழங்குனரை கவராதப்படசத்தில் அப்பிரதேச வாசிகளினால் செயற்படுத்தவும் பேணவும் முடிந்த இடைநிலை போக்குவரத்து வழிவகைகளை (Intermediate Mode of Transport) ஊக்கப்படுத்துவது ஒரு சவாலாக காணப்படலாம். சைக்கிள்கள், கைவண்டிகள், மோட்ார் வாகனங்கள், மாட்டு வண்டி, டிரக்டர்கள் போன்ற வாகனங்கள் சாதாரணமாக கிராமபுறங்களில் போக்குவரத்துக்காக உபயோகிக்கப்படுகின்றன. இச்சேவைகளை வழங்குவதற்கும் முகாமை செய்வதற்கும் சமுதாய பங்களிப்பினை ஊக்கப்டுத்தல் கிராமப்புற நகர்வினை அதிகரிக்கும் நம்பிக்கையான தெரிவாக கொள்ளலாம்.

இறுதியாக, தெரிவு செய்யப்பட்ட பிரதேசங்களில் உள்ளீடு இலக்கு: வடக்கு கிழக்கை போன்ற சில பிக்தங்கிய பிரதேசங்களில் குடிப்பெயர்வு மற்றும் பிராந்திய இணைப்பிலான வர்த்தகமும் நீடித்த போர் சூழ்நிலை மற்றும் உள்நாட்டு பிரிவினை காரணமாக மந்தக் கதியிலேயே நகர்கின்றது. சமாதானத்தின் உடனடி நன்மைகளாக உற்பத்திகளின் வேகமான நகர்வு மற்றும் விலைகளின் ஒருங்கிணைப்பினையும் குறிப்பிடலாம். தமிழீழ விடுதலை புலிகள் 1990 ஆம் ஆண்டில் வட மாகாணத்தை குறிப்பாக யாழ்ப்பாண தீபகற்பத்தை தமது இராணுவ ஆட்சியின் கீழ் கொண்டுவந்த பின்னர் அங்கு பொருளாதார தடை விதிக்கப்பட்டதை கவனித்தில் கொள்ள வேணடும். இத்தீபகற்பத்தை 1995 ஆம் ஆண்டளவில் அரசு மீண்டும் அதனுடைய ஆட்சியின் கீழ் கொண்டு வந்தது. எனினும் சரக்குகளின் போக்குவரத்து கப்பலின் மூலம் மாத்திரமே திருக்கோணமலையிலிலுந்து இடம்பெற்றது. நாட்டின் ஏனைய பாகங்களுடன் யாழ்ப்பாணத்தின் வீதி இணைப்பு 2002 போர் நிறுத்த உடன்படிக்கையின் பின்னர் A9 நெடுஞ்சாலை மூலம் தற்காலிகமாக மீள மேற்கொள்ளப்பட்ட போதிலும் தமிழீழ விடுதலைப்புலிகளின் சட்ட விரோத வரிவிதிப்பின் காரணமாக பொருட்களின் வரவு கட்டுபடுத்தப்பட்டிருந்தது. மீண்டும் மேலோங்கிய போர் சூழ்நிலையின் காரணமாக A9 வீதி 2005 ஆம் ஆண்டு மீள மூடப்பட்டது.



அாசின் 2009 இராணுவ வெர்றியின் காரணமாக ஸ்தாபிக்கப்பட்ட பொது நிறுவனங்களால் பொருட்கள், பண்டங்களின் போக்குவரத்துக்காக A9 வீதி மீண்டும் திறக்கப்பட்டது. இலங்கை இராணுவத்தின் பாதுகாப்பு இசைவுச்சான்று பெற்ற பின்னர் சரக்குவண்டி குழாம்கள் யாழ்ப்பணத்திற்கும் யாழ்ப்பாணத்திலிருந்தும் பொருட்களை நகர்த்துவதற்கு இடமளிக்கப்பட்டுள்ளது. இதன் விளைவு என்ன? யாாழ்ப்பாணத்திற்கும் நாட்டிக் ஏனைய பாகங்களுக்குமிடையே காணப்பட்ட வேகமான விலை ஒருங்கிணைப்பாகும். போர் சூழ்நிலையின் உச்சக்கட்டத்தில் 2007 இன் பிற்பகுதியில் ஒரு மூட்டை சீமெந்தின் விலை நாட்டிக் ஏனைய பாகங்களுடன் ஒப்பிடுகையில் யாழ்பாணத்தில் மாத்திரம் நான்கு மடங்கு அதிகமாகவே காணப்பட்டது. பருத்திதுறை அபிவிருத்தி நிலையத்தினால் மாதாந்தம் நடாத்தப்படும் விலை கண்காணிப்பிற்கமைய மே--ஜூலை 2008 என்ற மூன்று மாதக்காலத்தில், யாழ்ப்பாணத்தில் குறிப்பிட்ட பத்து வகையான பொருட்களின் விலைத்தொகை கொழும்புடன் ஒப்பிடுகையில் 48 சதவீதமாக காணப்பட்டது. மே--ஜுலை 2009 இல் அதே பொருட்களுக்கான சராசரி விலைத்தொகை 24 சதவீதமாக குறைந்ததை அவதானிக்கலாம் (உரு.4).

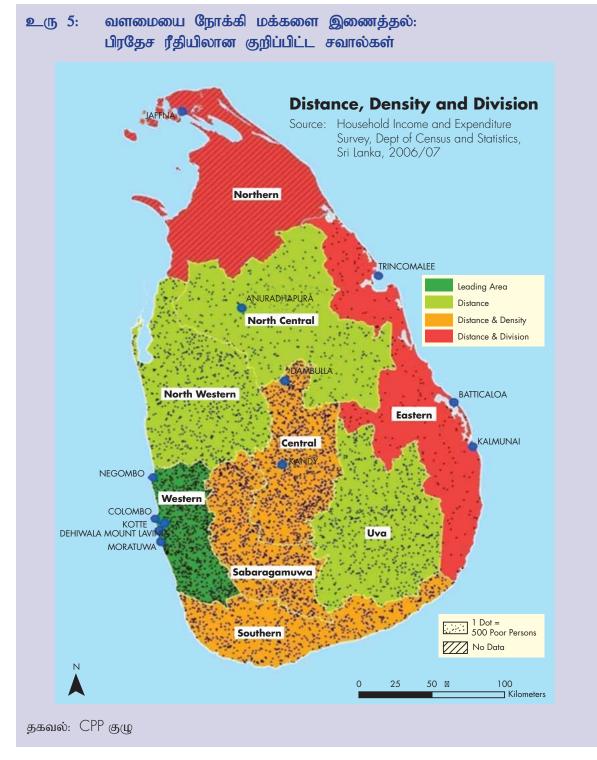
நாட்டை பொது தாபனங்கள் ஒன்றினைக்கும் கட்டத்தில் இடைநிலை பகுதியில் தொழிலாளர் மற்றும் உற்பத்தி நகர்வு அதிகரிக்கும். ஆனால் குறுகிய காலப்பகுதியில் போர் முடிவுக்கு வந்த பிரதேசங்களில் பொருளாதார நிலையை உயர்த்த இந்நடவடிக்கை உபாயமிக்க உள்ளீடுகளை கொண்டிருத்தல் அவசியம். எனினும், முன்னேற்றமடைந்த பகுதிகளிலிருந்து இத்தாபனங்களை மீள நகர்த்துவதை பார்க்கிலும் பாவனைக்கும் பாவனையாளர்களுக்கும் நிலநகர்வை மேற்கொள்ள வேண்டும். இது கட்டமைப்பு உருமாற்றத்தை துரிதப்படுத்தும். விவசாய நிலச்சந்தைகளின் செயற்பாட்டினை அதிகரிக்க ஸ்தாபன சீர்திருத்தங்கள் ஒர் முக்கிய தேவையாகும். நில பாவனை மற்றும் கைமாற்றத்தை ஒழுங்கு செய்யும் நில அபிவிருத்திச் சட்டங்கள், பாரிய விகிதாசாரத்தில் மக்களை விவசாயத்திலேயே தங்கியிருக்கும் நிலைக்கு மக்களை தள்ளியுள்ளது. தங்களது உழைப்பிற்கேற்ற ஊதியமில்லாத காரணத்தினால் அவர்கள் வறுமையிலேயே வாழ்கின்றனர். இச்சட்டங்களை சற்று தளர்த்துவதன் மூலம் விவசாய வருமானங்களை உயர்த்தும் சாத்தியகூறுகள் தென்படுவதுதோடு வறுமை குறைப்பினை அதிகரித்து நீண்டகால மாற்றத்தை ஏற்படுத்தலாம்.

பொருளாதார அபிவிருத்தியை முன்னேற்றும் குறிப்பிட்ட மானியங்கள் காணி நிலச் சந்தையின் நிலையற்ற தன்மையை சரிசெய்வதற்குமான ஸ்தாபன சீர்திருத்தங்கள் மூலமாக நன்கு செயற்படும். பின்தங்கிய பிரதேசங்களில் அநேகமானவை இயற்கை வளங்கள் நிறைந்தவை. அத்துடன் CIC நிறுவனத்தார் (Chemical Industries Colombo), ஹேய்லிஸ் நிறுவனத்தார் (Hayleys) போன்ற தனியார் முதலீட்டாளர்கள் பிரதேசத்தின் கிராமிய பொருளாதார ஆற்றலின் மூலம் நன்மைகளை பெற தங்களுடைய செயற்பாடுகளை கிழக்கு மாகாணத்திற்கு நீடித்துள்ளனர். தொழிநுட்ப முன்னேற்றம் தொடர்பாக அறிவையும் பண்ணை வெளியீடுகள் மற்றும் உற்பத்திக்கான ஆற்றலையும் பெற்றுக்கொள்ள உதவும் தற்போதைய முயற்சிகள், சந்தை இணைப்புகளை விருத்தி செய்யும். அதேபோல அதிக விளைச்சலை அளிக்கும் நெல் வகைகள், மாற்று பயிர்செய்கைகள், நீர்பாசன நுட்பங்கள் மற்றும் இயற்கை இயல்புமிக்க பசளை வகைகளை மக்களுக்கு அறிமுகப்படுத்தல் அவசியம்.

பிரதேச ரீதியிலான குறிப்பிட்ட சவால்களுக்கேற்ற கொள்கைகளை இயற்றல்

வினைத்திறன்மிக்க வகையில் வளமையுடன் மக்களை தொடர்புபடுத்த வெவ்வேறு பிரதேசங்களில் மக்கள் முகங்கொடுக்கும் குறிப்பிட்ட சவால்களுக்கமைய கொள்கைகள் உருவாக்கப்பட்டிருத்தல் அவசியம். சுகல இடங்களிலும் அடிப்படை சேவை வழங்கலை விருத்தி செய்தலே வெற்றிகரமான கொள்கை முயற்சிகளுக்கான அடிக்கல்லாக காணப்படுமென இவ்வறிக்கையின் ஆய்வுகள் சுட்டிக்காட்டுகின்றன. அத்துடன் அதிகளவிலான வறிய மக்கள் வாழும் பின்தங்கிய பிரதேசங்களை முன்னேற்றமடைந்த பிரதேசங்களுடன் நேரடியாக இணைக்கும் உட்கட்டமைப்பானது வர்த்தகத்தையும் வாணிகத்தையும் உயர்த்தும். சந்தை சக்திகளால் கைவிடப்பட்ட சில பிரதேசங்களில் பொருளாதாரத்தை கட்டியெழுப்ப குறிக்கோள்களுடைய உள்ளீடுகள் அவசியம். முன்னுரிமைபடுத்தலின் பிரதான காரணிகள் எவை?

குறிப்பிட்ட பிரதேசத்துக்கான சவால்களின் கடுமையான தன்மைகேற்ப கொள்கைகளின் பண்பாற்றலை அறிந்து செயற்பட ஒரு கட்டமைப்பை உலக அபிவிருத்தி அறிக்கை 2009 வடிவமைத்துள்ளது. அத்துடன் இவை வறுமையான பிரதேசங்கள் எவை மற்றும் வறிய மக்கள் வாழும் பிரதேசங்கள் எவை என்பதை காட்டும் வறுமை வரைப்படங்களோடு நன்கு தொகுக்கப்பட்டு காணப்படுகின்றது. அநேக சந்தர்ப்பங்களில் மேற்குறிப்பிட்ட இரண்டும் ஒன்றல்ல. ஏனெனில் வறிய மக்கள் வறிய பிரதேசங்களை விட்டு நகர்வதற்கான காரணங்களை அதிகமாக கொண்டுள்ளனர். முக்கியமாக மேல் மாகாணத்தில்-பல வறிய மக்கள் வளமைக்கு அருகிலேயே வசித்து வருகின்றனர் என்பதை காட்டும் உரு. 3 இல் காணப்படும் "வறுமை மலைகளை" சற்று நோக்குக. தலைக்கு ரூபா 6935/= செலவினையும் வறுமை தகவு 8.2 சதவீதத்தினையும் கொண்ட மேல் மாகாணமே நாட்டின் வளமைமிக்க பிரதேசமாகும். அதேவேளை இலங்கையின் 16.8 வறியவர்களின் வசிப்பிடமும் இம்மாகாணமே. மாறாக, தலைக்கு 3879/= செலவினையும் வறுமை தகவு 27 சதவீதத்தினையும் கொண்ட ஊவா மாகாணமே நாட்டின் வறிய பிரதேசமாகும். ஆனால் இலங்கையின் 12.3 வீத வறியவர்களுக்கு மாத்திரமே வசிப்பிடமாக இது காணப்படுகின்றது.



வறிய மக்கள் எங்கு வாழ்கின்றனர் என்பதை உரு. 5 காட்டி வளமைமிக்க பிரதேசங்களுடன் வறியமக்களை எவ்வாறு தொடர்புபடுத்துவது என்பதை முன்னுரிமைப்படுத்துகின்றது. வறியவர்களின் மாகாணத்திலேயே காணப்படுகின்றதேயன்றி பின்தங்கிய பிரதேசங்களிலல்ல. செறிவு மேல் வளத்துடன் மக்களை இணைப்பதற்காக பின்வரும் முன்னுரிமைபடுத்தப்பட்ட விடயங்களை அபிவிருத்தி அறிக்கை 2009 இல் காணப்படும் கொள்கை இவ்வறிக்கையின் ஆய்வும் உலக சட்டகமும் எடுத்துக்காட்டுகின்றன:

- சிதறப்பட்டு காணப்படும் நாட்டின் வறிய மக்களில் ஒர் சிறு பாகம் ஊவா, வடமத்திய, மற்றும் வடமேல் மாகாணங்களிலிருந்து வந்துள்ளனர். தொடர்புபடுத்தல் கொள்கைகளின் மூல கையிறுப்பு தொழிலாளர் நகர்வினை விருத்தி செய்வதற்கான நடவடிக்கையாக காணப்பட வேண்டும். முதலீடுகள் கீழ்மட்ட பொருயாதார வரவுகளையே ஏற்படுத்தும் என்ற காரணத்தினால் இப்பிரதேசத்தில் பாரியளவிலான நீடித்து நிலைக்கக்கூடிய உட்கட்டமைப்புகளை உருவாக்கல் எவ்விதத்திலும் சாத்தியப்படாத ஒன்றாகும். ஆனால் சுகாதாரம், கல்வி போன்ற அடிப்படை சேவைகளின் தரத்தை அதிகரிப்பதனால் கொள்கைகள் குடிப்பெயர்வினை சாத்தியப்படுத்துவதோடு மக்களை வளமைக்கு அறுகில் கொண்டு செல்லும்.
- இலங்கையின் 50 சதவீதமான வறிய மக்களின் வசிப்பிடமாக மத்திய, சபிரகமுவ மற்றும் தென் மாகாணங்கள் காணப்படுகின்றன. ஆனால் இவர்களின் நகர்விற்கு சில தடைகற்கள் காணப்படுகின்றன. தொழிலாளர் நகர்வினை முன்னேற்ற சேவைகளின் தரத்தை உயர்த்துவது முக்கியம், ஆனால், அது மாத்திரம் இதை சாத்தியப்படுத்தாது. மேல் மாகாணத்திலுள்ள சந்தைகளுடன் இப்பிரதேசங்களை நேரடியாக இணைப்பதற்கு உட்கட்டமைப்பு விருத்திகள் தேவைப்படுகின்றது. கொழும்பு-கண்டி அதி வேக சாலைகள் மற்றும் தென் மாத்தறை நெடுஞ்சாலை போன்ற முதலீடுகள் போக்குவரத்து செலவினை குறைப்பதன் மூலமாக உயர்மட்ட பொருளாதார வரவுகளை ஏற்படுத்தும் சாத்தியகூறுகள் உள்ளன. இது வேகமான வளர்ச்சி மற்றும் சகலதுமடங்கிய அபிவிருத்தி இரண்டிலும் வெற்றியடையச் செய்யும்.
- பெரும்பாகத்திலான நாட்டின் வறியவர்களை கிழக்கு மற்றும் வட மாகாணங்கள் கொண்டிராத பட்சத்திலும் உள்நாட்டு பிரிவினை காரணமாக தொழிலாளர் நகர்வு, உற்பத்தி பொருட்கள் கைமாற்றம் போன்றவை கட்டுபடுத்தபட்டுள்ளன. பொது ஸ்தாபனங்கள் ஒருங்கிணைப்பிற்கு ഖகെயில் பொருட்களின் உகவிபரியம் என்பதை காட்டும் உணவு ഖിலെ வதில் ஒருங்கிணைய முனைகின்றன. எனினும் குறுகிய காலத்தில் சமாதான நன்மைகளை அதிகரிக்க இப்பிரதேசங்களில் வளமையை ஏற்படுத்துவது மிகவும் அவசியமான ஓர் விடயமாகும். ஆனால் இப்பிரதேசத்தின் பொருளாதார ஆற்றலை உபயோகத்திற்குள்ளாக்குவது மேல் மாகாணத்திலிருந்து பொருளாதார செயற்பாடுகளை வேறு இடங்களுக்கு எடுத்து செல்லம் கொள்கைகளின் அடிப்படையில் இடம்பெறகூடாது. இதைவிட விவசாய நிலங்களின் உபயோகம் மற்றும் கைமாற்றத்தை விருத்தி செய்யும் மட்டத்தில் இவை காணப்பட வேண்டும். மேலும் உழவர் அல்லது கமத்தொழில் செய்பவர்களுக்கு சந்தை தொடர்புகளை மேற்கொள்ள உதவி புரியும் குறிகோள் மிக்க முயற்சிகளை கொண்டிருத்தல் வேண்டும். இம்முயற்சியை தொடாந்து அடிப்படை பொது சேவை வழங்கல் மற்றும் தரத்தை அதிகரிக்க நடவடிக்கை எடுக்கப்பட வேண்டும்.

பொது ஸ்தாபனங்களும் சேவை வழங்கல் தரங்கள் மற்றும் உட்கட்டமைப்பு தொடர்பும் குறிகோள்மிக்க உள்ளீடுகளும் என்ற இயல்பாற்றலை அறிந்து செயற்படகூடிய கூட்டிணைப்பினை உபயோகித்து வளமையுடன் மக்களை இணைப்பதற்கான கொள்கை தெரிவுகளை உரு.1 தொகுத்து வழங்கியுள்ளது. மாகாணங்களுக்கு மத்தியில் வளர்ச்சியினால் ஏற்பட்ட நன்மைகளை பகிர்ந்தளிக்கும் அதேவேளைநடுத்தர வருமானதிற்கூடான பயணத்தை அதிகரிக்கவும் மேலும் இக்கொள்கைகள் உதவிசெய்கின்றன. பொருளாதார வளமை சில பிரதேசங்களில் மாத்திரமே கவனக்குவிப்பை செய்கின்றன என்பதை கொள்கை இயற்றுனர்கள் கண்டுக்கொள்வார்கள் ஆனால் இதன் மூலம் அதிகளவிலான மக்கள் வளமையுடன் இணைக்கபடுவார்கள்.

இணைப்	இணைப்பதற்கான முன்னுரிமைகள்					
மாகாணங்கள்	வடமத்திய, வடமேல், ஊவா மாகாணங்கள்	மத்திய, சபிரகமுவ, தென் மாகாணங்கள்	கிழக்கு, வடக்கு			
சவால்கள்	செறிவற்ற மக்கள் தொகையை கொண்ட பின்தங்கிய பிரதேசங்கள் (பொருளாதார தொலைவு)	செறிவான மக்கள் தொகையை கொண்ட பின்தங்கிய பிரதேசங்கள் (பொருளாதார தொலைவு மற்றும் தவறிய மக்கள் செறிவு)	செறிவற்ற சனத்தொகையை கொண்டதும் உள்நாட்டு பிரிவுகளை கொண்டதுமான பின்தங்கிய பிரதேசங்கள் (பொருளாதார தொலைவு மற்றும் உள்ளக பிரவுகள்)			
கொள்கை முன்னுரிமைக	கள்					
இடஞ்சாா்ந்த குருட்டு தன்மையிலான ஸ்தாபனங்கள்	சுகாதார மற்றும் கல்வி விளைவுகளை விருத்தி செய்தல். சுத்தமான நீர் வினியோகம் மற்றும் ஆரோக்கியம்	சுகாதார மற்றும் கல்வி விளைவுகளை விருத்தி செய்தல். சுத்தமான நீா வினியோகம் மற்றும் ஆரோக்கியம்	சுகாதார மற்றும் கல்வி விளைவுகளை விருத்தி செய்தல். சுத்தமான நீர் வினியோகம் மற்றும் ஆரோக்கியம் நில உபயோகம் மற்றும் மாற்றத்தின் பயனுறுதியை விருத்தி செய்தல்			
இடஞ்சார்ந்த இணைப்பினை கொண்ட உட்கட்டமைப்பு		பிராந்திய மட்டத்திலான போக்குவரத்து உட்கட்டமைப்பு- பொழும்பு மாநகர பிரதேசத்தினூடான இணைப்பினை விருத்தி செய்தல்				
இடஞ்சாா்ந்த இலக்கிலான உள்ளீடுகள் / தலையீடுகள்			விவசாயம் மற்றும் விவசாயம் சார்ந்த கைதொழில்களுக்கான சந்தைகள் சந்தை தொடர்பு விரிவாக்கங்கள் கொழும்பு மாநகரத்திற்கு வெளியே செயற்பாடுகளை கொண்டு செல்ல வேண்டாம்.			

உரு. 1: ஒவ்வொரு கூற்று தொகுதிக்கும் ஒரு யுத்தி-மக்களை வளமையுடன் இணைப்பதற்கான முன்னுரிமைகள்

Endnotes

- 1 "கொண்டைனரைசேன் இன்டர்நனல்" என்ற சஞ்சிகயைின் உலக துறைமுகங்கள் வரிசையில் குறிபிடதக்க ஏற்றுமதி சரக்குடன் 2006ல் 34வது இடத்திலிருந்து 2008ல் 27வது இடத்தை கொழும்பு எட்டியுள்ளது. உலகலாவிய பொருளாதார பின்னடைவின் காரணமாக கப்பல் சரக்களவு கூர்மையான வீழ்ச்சியடைந்தமையை கவனத்தில் கொள்ளவும். எனினும் தற்பொழுது இது மாறி வருகின்றது.
- 2 வருடாந்த கைதொழில் புள்ளி விவரவியல் 2003: விலைகள் 2007: 80 சதவீத கைதொழில் வரவு.
- 3 உலக வங்கியால் ஏப்ரல் மாதம் 2009 இல் நடாத்தப்பட்ட கப்பல் போக்குவரத்து கட்டணங்கள் ஆய்வின் அடிப்படையில் இலங்கையின் மதிப்பு தொகைகள் காணப்படுகின்றது. ஐக்கிய அமெரிக்காவின் மதிப்பானது கொல்கலன் கப்பல் போக்குவரத்து கட்டணங்கள் தொடர்பான பொது வெளியீட்டின் அடிப்படையில் காணப்படுகின்றது. மையிலுக்கு இரண்டு டாலர் அல்லது கிலோமீற்றருக்கு 1.25 டாலர் விலையினை குறிக்கும் [பெருவிரல் அளவு விதி] பொது கூற்றினை கொண்டுள்ளது.
- 4 மட்டகளப்பு நகரம் (மட்டகளப்பு மாவட்டம்), வவுனியா நகரம் (வவுனியா மாவாட்டம்), கல்முனை (அம்பாறை மாவட்டம்) மற்றும் யாழ்பாணத்தின் திருநெல்வேலி சந்தை போன்ற இடங்களிலில் இரண்டு வாரங்களுக்கு ஒரு முறை விலைகளை பதிவு செய்யும் (த பிரைஸ் மொனிட்டர்) என்ற விலை கண்காணிப்பு அறிக்கை. இதன் மாதாந்த தரவுகள் இரு வார அவதானத்தின் சாதாரண சராசரியாகும். இதில் காணப்பட்ட 10 பொருட்களும் யாழ்பாணம் இறக்குமதி செய்யும் பொருட்களில் உள்ளடங்கும். அத்துடன் ஒருங்கிணைப்பின் மூலமாக எதிர்பார்க்கப்பட்ட விலை வீழ்ச்சி காணப்பட்டது. தனிமைப்படுத்தப்பட்ட காலப்பகுதியில் சந்தையில் இடம் பெற்ற அளவிற்கதிகமான வினியோகம், நாட்டின் ஏனைய பாகங்களிலும் பார்க்க யாழ்பாணத்தில் சில பொருட்களின் விலை குறைவதற்கான காரணமாகும். உதாரணம்: வெங்காயம், சோயா, கரட்

1. UNBALANCED GROWTH AND INCLUSIVE DEVELOPMENT

1.1 RESHAPING ECONOMIC GEOGRAPHY

Sri Lanka's economic geography is being reshaped as land uses change 1. to accommodate higher value production, as people move closer to economic opportunities, and as products are transported between areas. Building on an exportoriented liberalization strategy initiated in 1977, Sri Lanka's economy has transformed from specializing in primary products to manufacturing. While manufactures made up 6 percent of exports in 1975, they now contribute 60 percent. Entrepreneurs have concentrated production around the Colombo metropolitan area, taking advantage of proximity to the country's international port and to other enterprises in the same line of business. The result? Land use is changing, as Colombo and its surrounding districts in Western Province now account for 70 percent of industrial value added, up from 43 percent in 1983. The area is home to 37,000 industrial production units, employing 540,000 people and generating more than Rs. 527 billion in value added.⁵ It employs over 60 percent of the country's 400,000 textiles and garment workers. Also, rising economic density is accompanied by higher productivity-industrial value added per employee in Western Province was Rs. 1 million in 2007 and compensation Rs. 200,000-twice that in all of the other provinces.⁶

2. Rising economic densities in Western Province have improved living standards for many Sri Lankans, including those who were born far from economic density. People have overcome economic distance by moving closer to economic opportunity. More than 1.5 million people living in Western Province were born in other parts of the country, and a 2004 survey highlights that almost 90 percent of migrants interviewed reported

better jobs as the primary reason for moving.⁷ Portable assets, such as education, have fueled labor mobility, with migrants reaping higher rewards for their skills in Western Province. And the increasing scale of remittances to families left behind has improved living standards in lagging areas. At the same time, interaction between people in Western Province and nearby areas has increased, as containers carrying intermediate goods and final products physically connect the leading area with its neighbors. Traffic volumes on trunk roads of the national network—such as the A1, A2, A3 and A4, close to the border of Colombo—are between 60,000 to 80,000 vehicles a day. And corridors with high demand attract several transport providers, lowering prices and further increasing the scale of interaction.

The market forces of agglomeration, migration and specialization are reshaping 3. Sri Lanka's economic geography along three dimensions – higher densities as firms concentrate production, shorter distances as workers move closer to density, and fewer divisions as places are better connected to markets and trade with each other. World Development Report 2009, "Reshaping Economic Geography" (WDR 2009), introduces the use of these spatial dimensions (box 1.1) and highlights how countries such as the United States, France, and Japan reshaped their economic geography along these lines when they transitioned from low-income to high-income economies. Countries such as China and India are reshaping their economic geography now as they try to change their economic fortunes. Indeed, the main insight from two centuries of international experience, as reviewed in WDR 2009, is that economic growth will remain unbalanced, and attempts by policymakers to spread out economic activity is tantamount to discouraging this growth. But development can still be inclusive as people born in economically lagging areas can be connected with the growing concentration of wealth in prospering places. And the way to get the benefits of both uneven growth and inclusive development is through economic integration.

4. WDR 2009 develops a policy framework for connecting people to prosperity. Rather than overemphasize the improvement of economic opportunities in remote or lagging areas, policies should amplify the interaction between leading and lagging areas. Such spatially targeted interventions are a small part of what governments can do to help lagging areas. Governments can ensure that common institutions unify all places and establish infrastructure that connects some places to others. This will increase the movement of people and trade of products across areas. WDR 2009 calls for a rebalancing of policy discussions to include all the instruments of integration. It shows how to use the three dimensions of density, distance, and division to tailor the use of these policy instruments to address integration challenges facing countries.

5. The greatest part of the policy challenge lies in identifying how ambitious countries can be in reducing spatial disparities in living standards. These ambitions need to be

Box 1.1: Spatial dimensions-density, distance, and division

To describe the geographic transformations that accompany development, World Development Report 2009, "Reshaping Economic Geography," (WDR 2009) introduces three spatial dimensions—density, distance, and division.

These dimensions describe development in real space. The terms are easy metaphors, but they also have a technical interpretation. Density generally signifies the intensity of economic activity on a unit of land. Distance signifies the costs of getting to places with economic density. While density and distance relate closely to human and physical geography, division refers more to sociopolitical geography. Religion, ethnicity, and language are among the main attributes that lead to divisions between places.

Density, distance, and division are best illustrated by market access, an indicator of economic opportunity for a location that tells the size of the potential markets in its vicinity, and the ease of reaching them. Market access across geographic scales determines where economic activity can thrive and thus where firms will locate and populations will grow. Using this concept of market access, the three dimensions are defined as follows:

- Density indicates the size of economic output or total purchasing power per unit of surface area—for example, a square kilometer. It is highest in large cities where economic activity is concentrated and much lower in rural neighborhoods.
- Distance measures the ease of reaching markets. It determines access to opportunity. Areas far from economically dense centers in a country are more likely to lag.
- Division arises from barriers to economic interactions created by differences in currencies, customs, and languages, which restrict market access.

The difference between distance and division is that distance modulates access to economic opportunity in a more continuous way—a distance decay. Division, by contrast, presents discrete barriers to access and economic integration. It can be seen as increasing economic distance or travel time for a unit of physical (or Euclidian) distance. These definitions are not scientifically exact. When density is used, it means economic density: production per area of land. When any other measure of density, such as the population per square kilometer or the places where more of a nation's poor people live, it is qualified accordingly. Distance can be measured with some precision, but where infrastructure is sparse, straight-line distance is different from road or rail distance. Many other factors, such as the availability and affordability of transport services, determine actual accessibility. Division is associated with international borders, because they usually impede the ease of exchange or travel. But not all divisions imply international borders. Where religious, ethnic, and linguistic differences are manifest spatially, there can be divisions within countries.

Locally, within an area, the most important dimension is density, because generally distances are short and divisions few. Nationally, the most important dimension is distance to density; divisions within countries tend to be fewer, though they can be serious in some countries. This report focuses on the national dimension. Internationally, across a regional or global spatial scale, distances and divisions are usually more serious.

Source: WDR 2009.

tempered by a country's development level and its fiscal and institutional capacities. Where incomes are low, it may be feasible only to reduce spatial disparities in poverty rates and in access to essential shelter, water, health, nutrition, and education services. Upper middle-income countries can be more ambitious in equalizing basic consumption indicators across areas. And developed countries, such as those in the European Union, can be even more ambitious. Reducing spatial inequality in disposable incomes for highincome countries may be the relevant target. But at all stages of development, forcing economic production to spread evenly across areas is both elusive and expensive. Growth generally is unbalanced, but it always produces more resources for societies to balance development outcomes.

Box 1.2: Geographic transformation and economic integration

This report is not a poverty assessment, nor is it a report on shared growth. Nor is it a sector strategy for rural, urban, infrastructure, or social development in Sri Lanka. Instead, it concerns Sri Lanka's transformations that are improving production efficiency. And it identifies public policy priorities for connecting people to prosperity and increasing spatial equity in living standards.

Insights from the economics of geography and the policy framework in WDR 2009 provide the analytical foundations for the report. Data from a multitude of sources were compiled to empirically examine if theoretical predictions and insights of global experience were consistent with reality in Sri Lanka. Various rounds of household and industry survey data, geo-referenced information on infrastructure location and quality, land use and public service delivery, and subnational allocations of public expenditures and fiscal incentives were compiled and analyzed. Although many of these data have typically not been available in the public domain, disseminating them can facilitate further analysis and debate.

The analysis here shows that a major geographic transformation is under way, as firms concentrate production and increase economic densities, as workers move and reduce their distances from opportunity, and as divisions dissipate as products are traded across provinces. These transformations have accompanied Sri Lanka's journey to a middle-income country specializing in manufactured exports. Simultaneously, Sri Lanka has been successful not only in halving national poverty in 10 years, but in creating policies that have reduced poverty in almost all provinces. Public policies have helped integrate the country economically by flattening the geography of access to basic public services. But as Sri Lanka moves through middle income, it can design and implement more ambitious policies to improve living standards across provinces.

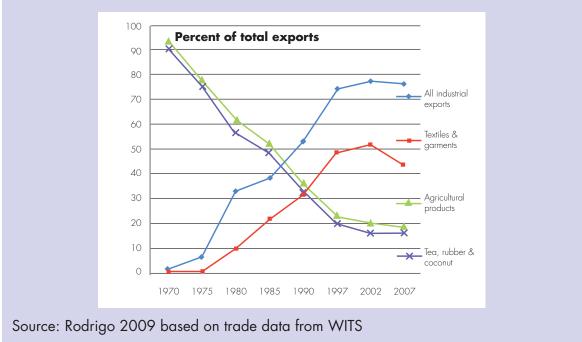
These policies will succeed if they amplify, not dampen, the processes of geographic transformation. By improving the quality of education and health services in all lagging areas, policies can ensure that children everywhere have the same opportunity and young people can find jobs in economically dynamic places. By improving infrastructure links between the leading Western Province and the densely populated Central, Sabaragamuwa, and Southern provinces, producers will be able to specialize and produce at a larger scale. And by helping land uses change in the Eastern and Northern provinces, policies can facilitate economic transformation in an area that was divided until recently.

6. This report, "Sri Lanka: Connecting People to Prosperity," provides new insights into geographic transformations in Sri Lanka and identifies public policy priorities for connecting people in economically lagging areas to places that are prospering. Box 1.2 highlights what is new about this report, clarifying what this report is not about. The report is organized in three parts. The first describes Sri Lanka's geographic transformation by separating the geography of production from the geography of living standards. While production becomes spatially efficient by concentrating in a few places, public policies help in making living standards spatially equitable. The second discusses the drivers of geographic transformation—fluid land, labor, and product markets. The third presents public policy priorities for connecting people to prosperity, taking into account potential tradeoffs between spatial efficiency and equity. Using the WDR 2009 framework, the report calibrates policies according to the severity of the integration challenge facing different areas.

1.2 GEOGRAPHY OF PRODUCTION

7. One of the main insights from recent thinking on geography and economic development is that firms in many industrial and business service industries value agglomeration economies, preferring to locate in proximity to other firms engaged in the same or related product lines and locations with good access to domestic and





international markets (ports). This concentration accelerates when countries liberalize and open up to trade.

8. Economic reforms stimulated a structural transformation of the Sri Lankan economy—from a production structure specializing in primary products to one based on manufacturing. Historically, exports were dominated by primary products, accounting for 90 percent of merchandise exports through 1970 and 80 percent around 1975 (figure 1.1) The production of primary products—tea, rubber, and coconut— exploited the country's rich natural geography centered on the well-watered and mist-laden central hill country where the British had an extensive system of large-scale plantations of first coffee, then tea, then rubber. These plantations brought relative prosperity to the country, though at the cost of nearly eliminating the most distinctive flora and fauna of an ecosystem frequently called paradise by medieval travelers, such as Ibn Batuta, Fa Hsien, and Marco Polo.⁸

9. But world markets have changed their view of Sri Lanka as its export mix has rapidly transformed over the past 30 years. While manufactures contributed 6 percent of exports in 1975, it accounted for 75 percent in 2007 (Figure 1.1). When petroleum derivatives and processed precious stones are excluded, manufactures make up 60 percent of exports and textiles and garments 43 percent. In contrast, primary products only accounted for 17 percent of exports in 2007. Firms, not farms now lead Sri Lanka's connectivity with global markets. As garments replaced tea as the country's major export, Sri Lanka entered a realm of increasing returns in which producers seek proximity to

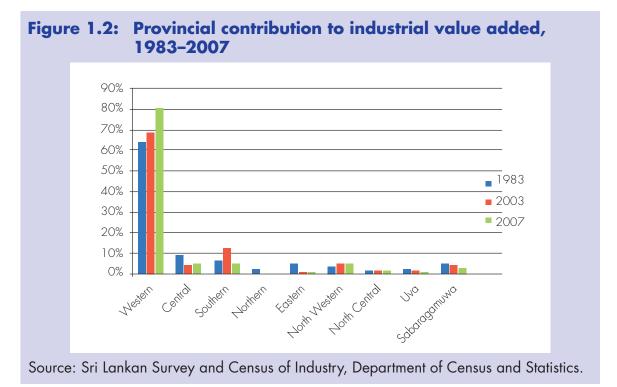
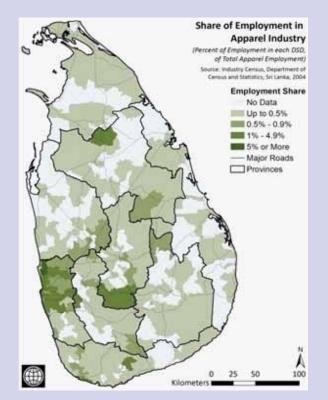
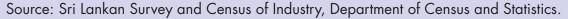


Figure 1.3: Geographic concentration in the apparel industry



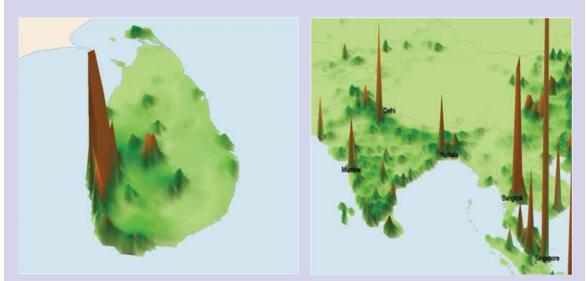


places offering access to international markets. This means that economic geography, not natural geography alone, will have a strong role in shaping Sri Lanka's future. And this means that development trajectories are likely to be locked-in, favoring a few places and making it difficult for other places to economically prosper.

10. The Western Province, particularly the area around Colombo has been favored by firms. Economic density is on the rise in Western Province, with 28 percent of national population, contributed 50 percent to GDP in 2008. Its share of national industrial value added rose from 63 percent in 1983 to 80 percent in 2007, and it employs 60 percent of the country's 400,000 textile and garment workers (figures 1.2 and 1.3).⁹

11. Benefiting from proximity to the country's international gateway, firms can specialize and benefit from economies of scale and agglomeration. For instance, change is constant in the apparel business as producers in Colombo have moved up the value chain from glorified tailor shops to design centers with in-house staff focusing on product design and development. And the rising demand for garments has allowed factories to specialize in producing not only garments and fabrics, but also hangers, bra molding, fabric printing, lingerie elastic, zippers, labels, packing materials, threads, and buttons.¹⁰ Economic mountains are now seen around the Colombo metropolitan region (figure 1.4, left panel); in contrast, the rest of the country looks relatively flat, with a few hills around Kandy and Galle. In fact, rising economic densities are one of the key geographic transformations that have accompanied the growth of today's developed economies as they progressed from lower incomes to middle and high.¹¹ For Sri Lanka, a broader view of the region shows that Colombo's economic mountain looks like a small hill in comparison to Bangkok and Singapore (figure 1.4, right panel), which, in turn, are dwarfed by Tokyo—the economically densest place in the world.

Figure 1.4: The economic mountains around Colombo are just hills when viewed from a distance

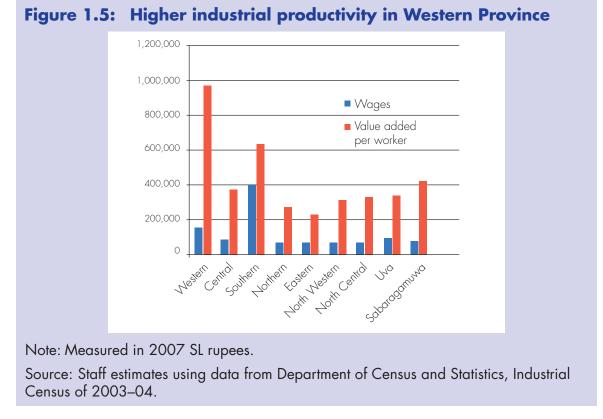


Note: Industrial production per square kilometer.

Source: World Bank Development Research Group's spatial analysis team based on sub-national GDP estimates

12. Rising densities have been accompanied by higher productivity. Industrial value added per worker in Western Province was Rs. 1 million in 2003 and compensation Rs. 151,000—twice that in all of the other provinces (figure 1.5).¹² Note that Southern Province values for 2003 are unusually high compared with previous and later years, indicating a statistical error, likely in the underreporting of workers. A follow-up survey in 2007 shows that wages in Southern Province were down to Rs. 87,000.

13. These stylized facts show that the geography of production has become unbalanced in Sri Lanka, as the country opened its economy and transformed from primarily exporting primary products to manufactures. The rise in economy density has been associated with higher productivity, contributing to economic progress. But has the geographical imbalance of production been accompanied by an even geography of living standards? The next section considers the geography of various measures of living standards.



1.3 GEOGRAPHY OF LIVING STANDARDS

14. As market forces favored concentration, have public policies helped balance living standards and make development inclusive? Consider the basic indicator of living standards—the incidence of poverty. Uva Province has the highest incidence of poverty, measured at 26 percent in 2007; in contrast, poverty incidence is 8 percent in Western Province (figure 1.6). But data from various editions of Sri Lanka's Household Income and Expenditure Survey (HIES) show that the national poverty rate fell between 1991 and 2006/7, as rates converged across provinces. In 1991 poverty incidence in Uva Province – the poorest, was 38 percent and dropped to 24 percent by 2006. In the Western Province – the richest, poverty incidence has dropped from 20 percent in 1991 to 6.5 percent in 2006. However convergence patterns are not comprehensive, as the survey data does not include poverty estimates for North and Eastern provinces.

15. Next, consider achievements in providing basic public services everywhere. Sri Lanka is one of the few lower middle-income countries that has surpassed or is close to achieving many of the Millennium Development Goals (MDGs). Despite the country's laudable achievements in delivering health and education services, gaps in some geographical pockets and vulnerable subgroups remain (table 1.1). The high-risk and underserved groups include the estate population, conflict-affected areas, internally displaced people, and the rural poor.

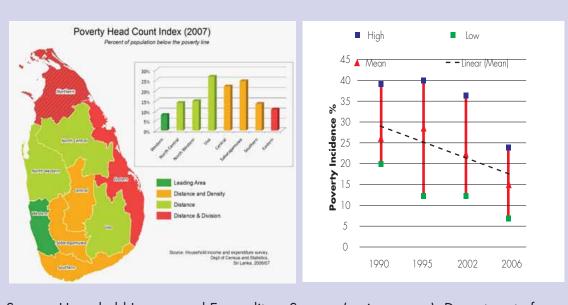
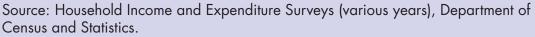


Figure 1.6: Incidence of poverty (province level estimates)

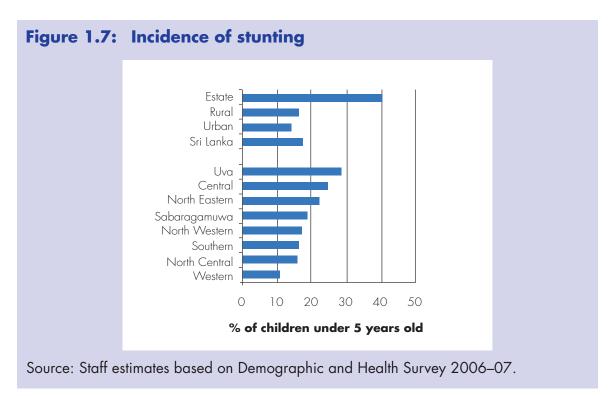


16. Undernutrition among children in Sri Lanka is particularly worrisome. One in five children under age five is stunted (figure 1.7) and one of every seven is wasted. Stunting, or low height-for-age, is caused by long-term insufficient nutrient intake and frequent infections. Stunting generally occurs before age two, and its effects—delayed motor development, impaired cognitive function and poor school performance—are largely irreversible. Wasting, or low weight-for-height, the result of acute significant food shortage or disease, is a strong predictor of under-five mortality.¹³ Stunting and wasting are 1.5 and 2.5 times more prevalent, respectively, in Badulla and Nuwara Eliya districts than in all of Sri Lanka.

17. Under-nutrition is characteristic of South Asia, even lagging behind Sub-Saharan Africa.¹⁴ Sri Lanka's struggle with malnutrition is puzzling, given its income, its achievements in other areas of health and in female literacy, and its ability to overcome many constraints that have plagued its neighbors. One explanation could be the fragmentation of uncoordinated nutrition programs. Among them are feeding programs that target pre-school and school-age children to attract poor children to attend school and provide them with adequate nutrition to stay in school. These programs are socially popular in many countries, but international evidence shows that targeting school-age children may be too late (box 1.3). Unlike Mexico's PROGRESA program, rigorously evaluated to distill lessons on what works, the nutrition programs in Sri Lanka are not evaluated.

Table 1.1:Achievements and unfinished agenda for Sri Lanka's
Millennium Development Goals on human development

Indicator	1990	Latest	2015 target	Achievement at the national level	Districts that are not on track		
Goal 1: Eradicate extreme poverty and hunger							
Target 1: Halve the proportion of people whose income is less than a dollar a day							
Poverty headcount ratio (% of population below the national poverty line)	26.1	15.2	13.1	On track	Badulla, Moneragala, Nuwara Eliya, Ratnapura		
Target 2: Halve the proportion who suffer from hunger							
Prevalence of underweight children under 5 years of age (%)	37.7	21.6	19	On track	Batticaloa, Jaffna, Vavuniya, Mullativu, Trincomalee		
Goal 2: Achieve universal primary ea	Goal 2: Achieve universal primary education						
Target 3: Children everywhere, boys	and girls a	like will be a	ble to compl	ete primary school			
Proportion of pupils starting grade 1 who reach grade 5	64.1	99.6	100	On track	None		
Literacy rate of 15-24 year olds	92.7	95.8	100	On track	Puttalam, Ratnapura		
Goal 3: Promote gender equality and	empower	women					
Target 4: Eliminate gender disparity i than 2015	n primary c	and seconda	ry education	preferably by 2005	and in all levels no later		
Ratio of girls to boys in secondary education	104.0	105.7	100.0	Exceeded	Batticaloa, Moneragala		
Goal 4: Reduce child mortality							
Target 5: Reduce under-five mortality	rate by two	-thirds					
Under-five mortality rate per 1000 live births	22.2	13.5	12	On track	Kandy, Nuwara Eliya, Batticaloa, Polonnaruwa		
Infant mortality rate per 1000 live births	19.3	11.3	12.8	Exceeded	Batticaloa, Polonnaruwa		
Goal 5: Improve maternal health							
Target 6: Reduce maternal mortality k	by three-que	irters					
Maternal mortality ratio per 100,000 live births	42.3	19.7	36	Exceeded	Kilinochi, Kegalle, Nuwara Eliya, Matale, Mullativu		
Proportion of births attended by skilled health personnel	94.0	97.6	99	On track	Moneragala		
Goal 7: Ensure environmental sustainability							
Target 10: Halve the proportion without sustainable access to safe drinking water and basic sanitation							
Proportion of households with sustainable access to an improved water source	72	85	86	On track	Kegalle, Nuwara Eliya, Ratnapura		
Proportion of households with access to improved sanitation	86	93	93	Exceeded	Batticoloa,Jaffna, Nuwara Eliya, Mullativu, Vavuniya, Trincomalee		
Source: Staff estimates based on data from Department of Census and Statistics (2008) and National Council for Economic Development (2005).							



18. As evident in table 1.1, Sri Lanka has commendable overall literacy and gender equity. But there are large differences in learning outcomes across areas. Students in Western and Southern provinces perform better on cognitive achievement tests in English, mathematics, and first language in all grades. Northern and Eastern provinces ranked at the bottom in all subjects in grade 3 and close to the bottom in other grades. The evidence from National Assessments of Learning Outcomes show rising cognitive achievement over time, and this is an encouraging finding. However, further improvement is required, especially in English language skills in all provinces. In addition, Sri Lanka should consider participating in international assessments, such as the Trends in International Mathematics and Science (TIMMS) test, which would enable the country to be benchmarked against international levels of achievement.¹⁵

19. These stylized facts highlight that Sri Lankan policies have helped in geographically balancing basic living standards and the delivery of public services. However, a middle income Sri Lanka can be ambitious in defining what basic services should include. The challenge now is to reduce regional disparities in health and education outcomes, to bring about "spatial blindness" in basic human development outcomes.

Box 1.3: Common policy and programmatic mismatches in designing and scaling up nutrition programs

While most countries do not scale up nutrition programs to any reasonable level, many scale-up the wrong kinds of programs. Three mismatches between the cause of malnutrition and program design have been identified from many countries.

- The "food first" mismatch: Many nutrition programs focus on food security and untargeted food supplementation, whereas unhealthy living conditions and poor childcare practices may be the main causes of malnutrition.
- The age-targeting mismatch: Most under-nutrition happens during pregnancy and the first two years of life and most of this early damage cannot be reversed. Yet many programs continue to expend considerable resources (especially food) on older age groups (children age three to six years, school children).
- The poverty-targeting mismatch: It is widely believed that under-nutrition is strongly correlated with income poverty, and that improving income poverty in itself will improve nutrition outcomes. Many countries therefore do not include direct nutrition interventions in their poverty reduction strategies.

Source: World Bank 2007.

2. IMPROVING THE FLUIDITY OF LAND, LABOR, AND PRODUCT MARKETS

20. Chapter 1 of the report provided stylized facts on Sri Lanka's spatial transformation as production concentrated and policies balanced basic living standards. This chapter examines the drivers of geographic transformation—transformation of land use, mobility of people, and flow of products. Fluidity in the markets for land, labor, and products facilitates land use change, enables workers to access economic opportunities and products to be traded across locations. The focus here is on identifying key constraints that slow these transformations. The next chapter uses insights from the analysis here and the stylized facts discussed previously to identify policies for economically integrating lagging and leading areas.

2.1 LAND USE TRANSFORMATION FOR ECONOMIC PROGRESS

21. Increasing the spatial efficiency of production is inherently linked to how the use of the same piece of land changes to accommodate economic density. During the early stages of urbanization, it is important that land is registered and private property rights allocated and protected. National institutions responsible for land rights should be spatially neutral—not distinguishing whether a place is rural, urban, coastal, or inland. In places with low urban shares, assigning property rights provides incentives to farmers for specializing in higher value crop production or making the land available for urban uses. In rapidly urbanizing places, land becomes scarce as firms and people flock to towns and cities. Policies that manage the use of land thus become important—if land use regulations respond to changing demand, cities can specialize in different products. In Sri Lanka, there is considerable public land ownership in rural areas – in contrast with

large urban areas where private ownership is much higher. In the Colombo Metropolitan Region for example, it is estimated that between 10 and 20 percent of the land (beyond street and road rights-of-way) is state owned.

22. The pace of sectoral and spatial transformations has been much slower in Sri Lanka's poor areas. Agriculture remains an important economic activity in the poorest provinces. For instance, in Uva, where 26 percent of residents live in poverty, about 90 percent of rural households drew income from agriculture. In Sabaragamuwa, with a poverty incidence of 24 percent, two-thirds of households in 2002 received some income from agriculture. But even in poor areas, nearly half of household incomes come from nonfarm sources. So, the emphasis on agriculture needs to be complemented with growth in nonfarm incomes and employment. Emphasis of the Mahinda Chintanaya (MC) on agricultural development to improve living standards in poor areas is not surprising, given that past poverty assessments have indicated a higher dependence on agriculture for livelihood in these provinces. But are policies inadvertently slowing the pace of economic and geographic transformation?

2.1.1 INSTITUTIONS REGULATING USE AND TRANSFER OF LAND

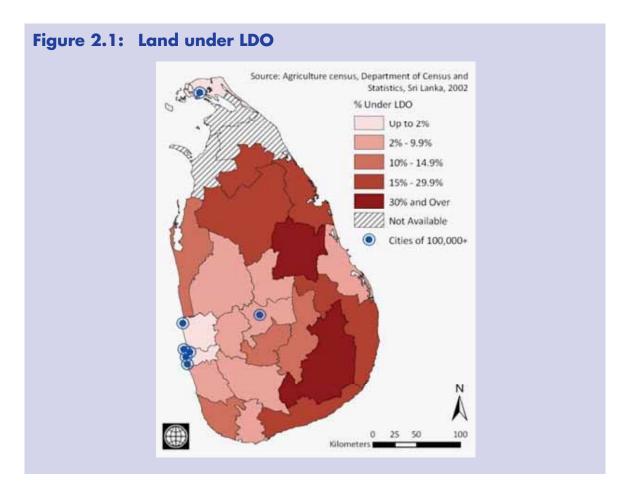
23. Consider the institutions that govern use and transfer of land. International experience shows that land market restrictions often affect not only farm productivity but also employment transition from farm to nonfarm sectors.¹⁶ Two types of restrictions are typically observed in developing countries: in land sale markets and land rental markets. The lack of a clear title and transfer rights reduces incentives to invest in land, restricts access to credit markets where land is accepted as collateral, and increases transaction costs in the land market. By contrast, an imperfect credit market pushes land prices above the net present value of profit streams from land use, making it difficult for poorer farmers to acquire land. Moreover, when insurance markets are absent, distressed land sales can deprive poorer farmers of a productive asset.¹⁷

24. A well-functioning rental market can reduce the costs imposed by restrictions on the sale of land, thus allowing land use and users to be more productive. It allows poorer households to stabilize incomes and reduce their dependence on volatile agricultural labor markets. With increasing opportunities for nonfarm jobs, the rental market also allows households to migrate closer to dense economic areas. In Vietnam, for instance, freeing land market transactions led to a higher incidence of non landownership, but it had no adverse impact on poverty. Indeed, people sold their land and sought better paying, nonfarm opportunities.¹⁸

2.1.2 EFFECTS OF LAND DEVELOPMENT ORDINANCES

25. What are the main restrictions on the use and transfer of agrarian land in Sri Lanka? An important feature of landownership is the government's ownership of large tracts of land. Of Sri Lanka's 6.56 million hectares of land, about 82 percent is owned by the state. More than 2 million hectares of state-owned land are used for agriculture: 1.38 million hectares are farmed by private farmers under varying tenure arrangements and 0.88 million hectares are privately held and largely located in Sri Lanka's wet zone. The land tenure system is the outcome of colonial laws and subsequent amendments. The Crown Lands Encroachment Ordinance of 1840 transferred all lands without private title—forests, waste, unoccupied, and uncultivated—to the state.

26. The Land Development Ordinance (LDO) of 1935 initiated a program of making government-owned agricultural land available for private household use. The original objectives were to protect the interests of the peasantry and encourage economic development. The state introduced a system of protected tenure under which the recipients of LDO land had the right to occupy and cultivate it in perpetuity, subject to restrictions on sale, leasing, and mortgaging, and to conditions for abandoning or failing to cultivate the land. Figure 2.1 shows the geographic distribution of land under the LDO. The



percentage under LDO is much lower in the urbanized Western Province, and more prevalent in the agriculture-dependent lagging areas.

27. With various amendments to the LDO over time, restrictions on land use consist of the following: (a) land cannot be sold or disposed of, except with the prior consent of an authorized government agent; (b) land can be mortgaged only to selected financial institutions stipulated by the government; (c) the allottee cannot lease or sublease the land, except in cases of extenuating circumstances, such as illness, and then only for up to one year; (d) the allottee cannot dispose of any portion of the land less than the prescribed minimum subdivision unit; (e) the allottee cannot dispose of all or a part of the land that would lead to co-ownership; and (f) the transfer of land is restricted to persons belonging to the same class, with prior approval of the government agent.

28. In 1996, the government launched a program of land reform to (a) transform the country's land administration system from one based on deeds and documents permitting private use of state land, to a system based on the registration of secure and clear titles; and (b) eliminate some market restrictions on privately held state-land leases, grants, and permits as well as on land sales. Eliminating these restrictions would enable the conversion from grants to full ownership, giving farmers about 1.4 million hectares of freehold titles to their land.

29. What are the implications of agrarian land market restrictions on agricultural productivity and sectoral transformation in Sri Lanka? A regression-based model examined the impact of LDO restrictions, employing data from the HIES 2002 and CFSES 2003. An individual in a location is assumed to make choices among different employment options—self-employment in agriculture, wage employment in agriculture, self-employment in nonagriculture, wage employment in manufacturing, and wage employment in services. A distinction is made between wage income from agricultural labor and nonagriculture work. Econometric details are reported in a background paper available on request.¹⁹

30. An important consideration in estimating the impact of LDO restrictions is that regressions cannot control for all types of locational attributes that may affect the employment choices or incomes of individuals and households. When these unobserved or omitted locational attributes are correlated with the area under LDO restriction, the resulting estimates are likely to be biased. To address this bias, two tools were used. First, a set of district-level fixed effects was introduced in each regression to capture the effects of unobserved factors that vary across districts but not within them. These fixed effects are likely to capture much of the effects of agricultural potential, climatic condition, population density, human capital, and other service provision. The analysis uses only district variations to estimate the impact of LDO restrictions. This regression can

be argued to provide lower bound estimates of the impacts of LDO. Second, instrumental variables were used to address the possibility that LDOs are endogenously determined based on a location's agricultural potential.

31. LDO restrictions slow the pace of transformation out of agriculture. Estimates from the regression model show a significant negative impact of area under LDO on the probability that people participate in all types of nonagricultural employment (table 2.1). The direct effect of distance to the nearest large city is negative and significant for nonfarm self-employment and wage employment in manufacturing. The interaction of LDO and distance is also statistically significant for all options except services. For wage employment in manufacturing and self-employment in nonfarm enterprises, participating in these activities declines with LDO restrictions and with an increase in the distance to urban centers. The interaction effect is positive because the impact of LDO is more pernicious in locations close to towns and cities. Similarly, participating in wage employment in manufacturing declines with an increase in the distance from major urban centers.

32. For services, however, access to large urban centers seems to matter less, and the interaction effect is not statistically significant. Services here are broadly defined as the residual of agriculture and manufacturing. The results are likely to look quite different for specific business services, such as finance, insurance, and real estate. This finding is not surprising because general service employment is found to be distributed more evenly across geographical space in other South Asian countries such as Bangladesh and India,²⁰ and may also result from the fact that a considerable share of service jobs are in the public sector.

33. In addition to keeping a larger proportion of people dependent on agriculture, land market restrictions tend to keep them poorer as they earn less per unit of labor. Wages are lower in a location with higher proportion of land under LDO compared with a location that is equidistant from an urban center but has a lower proportion of land under LDO. Employment in these locations with severe land regulations is less diversified toward nonfarm activities in manufacturing and services, and those employed in nonfarm labor earn much less on average. These results are quite remarkable given that the estimates already control for agglomeration externalities related to urbanization through district-level fixed effects. The regressions also control for differences in service provision across districts.

34. In conjunction with findings from the PSIA 2008 showing privately owned land commanding a premium of 15–25 percent over LDO lands, relaxing leasing restrictions on land under LDO is likely to have significant effects on agricultural incomes, poverty reduction, and longer term structural transformation. The analysis of land market restrictions

Table 2.1: Effects of LDOs on employment choice						
	Employeement in					
	Self-employ. Non- Agriculture	Wage Agriculture	Wage Manufacturing	Wage Services		
%Area under LDo	-1.681	3.127	-1.295	-1.550		
	(5.11)**	(6.51)**	(2.89)**	(2.75)**		
Travel Time to Large City	-0.051	0.035	-0.062	0.042		
	(2.57)*	(1.23)	(2.43)*	(1.20)		
Area LDO* Travel Time	0.420	-0.544	0.389	-0.060		
	(4.40)**	(4.83)**	(2.85)**	(0.37)		
District Fixed Effect Observations	Yes	Yes	Yes	Yes		
	24123	24123	24123	24123		

Table 2.1: Effects of LDOs on employment choice

Absolute value of z statistics in parentheses, * significant at 5%, ** significant at 1% Note: Base Category: Self Employment in agricuture Instrumental variable estimates

Source: Staff estimates based on data from Department of Census and Statistics (2008) and National Council for Economic Development (2005).

shows that an increase in the incidence of LDO leases is associated with lower nonfarm employment diversification. Areas with a higher percentage of land under LDO have disproportionately more people dependent on agricultural wage labor. The finding that nonfarm enterprise income also declines with an increase in land under LDO points to the negative effect of mortgage restrictions on the development of credit markets in lagging areas. The limited expansion of nonfarm enterprises in lagging areas means that wages for all types of workers have been depressed in areas with higher incidence of LDO leases. So, while LDO leases have created a middle-class peasantry in Sri Lanka, they seem to lower income prospects for agricultural workers, among the poorest in rural areas.

2.2 CONNECTING PEOPLE THROUGH LABOR MOBILITY

35. The mobility of labor can help mitigate differences in welfare that often accompany economic concentration. There are two main reasons to emphasize it. First, in contrast to capital that moves quickly in a globalizing economy, labor tends to be less mobile for cultural and linguistic reasons. Second, relative to capital, labor is subject to more political restrictions and to explicit and implicit barriers (see WDR 2009, chapter 5 for details). Indeed, policymakers have often viewed labor mobility—from lagging to leading regions or rural to urban areas—as a consequence of failed place-based policies. In

many countries, policies raise barriers to the mobility of labor. Consider the household registration system (the hukou system) in China, a barrier to rural-urban migration. Not having a hukou in urban areas means that migrants do not qualify for public education or health benefits, which can produce large interregional welfare differences. Recent research for China indicates that removing such mobility restrictions would reallocate labor across areas, reduce wage differences, and lower income inequality.²¹

36. Why people migrate depends on forces that "pull" as well as "push" them to leave. One big pull is economic density in leading areas. Differences in economic opportunity between lagging and leading areas often provide the main motivation for internal migration. In contrast, people are pushed off their land by severe declines in agriculture, by the pressures of population growth, and by environmental changes that make cultivation no longer viable. Historically, droughts have had sudden and prolonged impact on population distribution, particularly in Sub-Saharan Africa and South Asia.²² Conflict has also pushed people to migrate in Sub-Saharan Africa, and in many other developing regions.

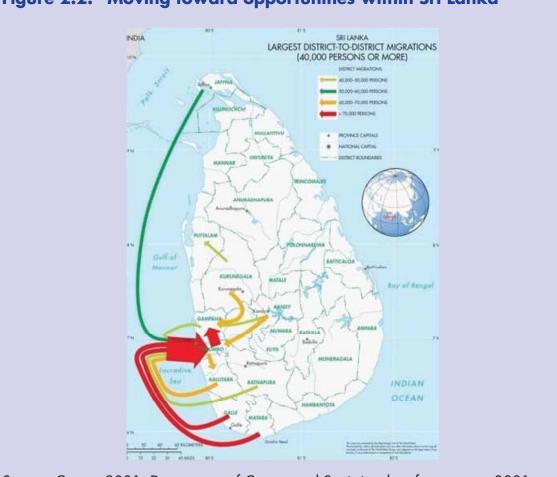
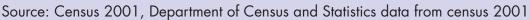


Figure 2.2: Moving toward opportunities within Sri Lanka



37. But in many low- and middle-income countries, another important push propels internal migration—the lack of adequate basic services in rural areas or in economically lagging regions. To a large extent, this topic has been overlooked in empirical analysis of migration decisions. In reality, however, the location of schools, health care centers, hospitals, and public and private amenities is correlated with the location of economic activity. In Africa, disparities in school enrollment and neonatal care among cities, towns, and villages are attributable to the near absence of schools and health facilities in outlying areas. Evidence from Central Asia shows that in the isolated parts of Tajikistan, schools are inadequately heated, drinking water is scarce, and garbage and sewage removal is lacking. So, as market forces encourage economic concentration, public services are underprovided in smaller towns, villages, and lagging areas. Although voluntary, migration in response to limited access to public services is more likely to add to congestion costs in cities than to contribute to agglomeration benefits.²³

38. How do "push" and "pull" factors play out in Sri Lanka? Data from the 2001 census show two streams of internal migrants—one moving toward economic density and the making the journey to safety. The dominant stream moved to Western Province, home to 1.5 million migrants or 45 percent of all those in the country (figure 2.2). This finding corresponds with the increasing importance of Western Province as the hub for most of industrial and commercial activity. Within Western Province, Gampaha District experienced the highest net in-migration rate, jumping more than one and a half times from 12.1 percent in 1991.²⁴

39. The secondary stream moved to the border of conflict areas in Northern and Eastern provinces, with in-migration rates particularly high in Polonnaruwa (37.7 percent), Moneragala (24.6 percent), Anuradhapura (22.8 percent), and Ampara (16.5 percent). Information from within Northern and Eastern provinces is not available. Overall, the pace of internal migration is picking up. Data from the 2001 census show that 45 percent of migrants claimed to have moved within the last decade, suggesting that the pace of internal migration increased in the 1990s. Findings from the HIES confirm this, showing an increase in migration between 1990–91 and 2002. The Consumer Finances and Socio-Economic Survey (CFSES) of 2003/04 also shows that internal migration almost doubled from 15 to 29 per 1,000 households between 1996–97 and 2003–04; in contrast, external migration stagnated at about 60–63 per 1,000 households (World Bank 2007c).

2.2.1 THE PULL OF PROSPERITY

40. Much internal migration in Sri Lanka is motivated by the pull of employment opportunities. Data from the CFSES 2003/04 show that 87 percent of respondents

reported better job opportunities as the primary reason for moving. While this survey considers only migrants who have left their families behind, results from a broader set of migrants show that more than 45 percent reported moving for work or in search of land (data from Sri Lanka Integrated Survey - SLIS 2000). Thus, Sri Lankans are fairly mobile, moving in response to economic incentives. Although people flock to opportunities, many are discouraged by the distance between their hometowns and Western Province. The largest flow of people to Western Province has been from nearby Central and Southern provinces.

41. Skills drive migration, with the better educated more likely to migrate. Of households moving in the country, the proportion of people with O-level education or above is much higher among the heads of migrant households than among those who remained in the district of origin. This tendency holds in all districts, including the poorest ones (figure 2.3 shows this for Colombo) (World Bank 2007c). Education also influences where people migrate. Between 1990 and 2000, the SLIS shows that less than 2 percent of migrants with 5 years of education could move to urban areas. By contrast, more than 11 percent of migrants with more than 12 years of education moved to urban areas. Education has been a core factor in explaining economic and spatial transformations in many countries, including the United States (see box 2.1).

42. Workers receive greater payoffs for their skills in dense areas. Survey data from HIES 1991 and 2006/7 show that differences in education have considerable bearing on living standards between Western Province and other areas. Empirical analysis is carried out to decompose differences in living standards into two parts, one arising from differences in endowments (for example, education, health, market access) and the other from differences in the payoff from these endowments (welfare improvements from these endowments). A three-step process is used for the analysis.²⁵ First, an ordinary least squares model (similar to the Mincerian wage equation model with regional fixed effects) is used to estimate household per capita expenditure as a function of experience (age) and human capital (years of education completed). Controls are included for observed household location differences between Western Province and non-western provinces, and between urban and nonurban areas. The model does not take into account possible difference of coefficients among different income groups.

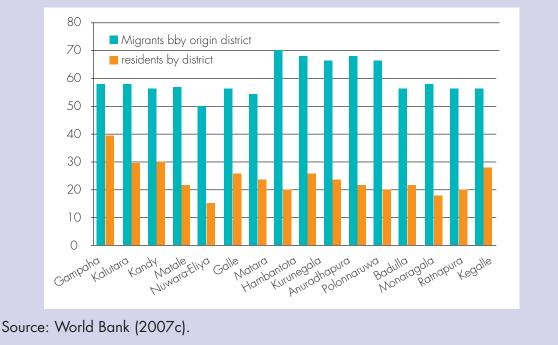
43. Second, a quantile regression model is used to estimate household per capita expenditures. The quantile regression allows for covariates to have marginal effects (payoffs) that vary with the household's position in welfare distributions. By using quintile regressions, one can investigate how welfare (expenditure) varies with household characteristics, such as at the 5th (very low), 50th (median), and 95th (very high) percentiles of the distribution of household expenditures. Third, the gap between Western Province and non-western provinces is decomposed at each quantile into two components: one

due to Western Province and non-western differences in the distributions of payoffs and the other due to differences in the distributions of household endowments between Western Province and non-western provinces.²⁶

44. The main findings from this analysis are summarized in figure 2.4. First, education measured as years of schooling contributes more to differences in living standards for the better off; between 1991 and 2006–07, the importance of education increased across all income groups. For the poorest decile, education differences explained 12 percent of regional differences in living standards in 1991; for the richest decile, education's contribution was 37 percent. In 2006–07, education differences contributed 32 percent to interregional living standard differences for the poorest decile and 46 percent for the richest decile. Second, while regional differences in levels of education matter, these endowment effects are dwarfed by regional differences accounted for 32 percent of the difference for the richest decile, while education levels contributed 14 percent. For the poorest decile, the respective contributions were 23 and 9 percent.

45. These estimates suggest that two forces may be at play. First, the poor in lagging areas may not be moving fast enough to Western Province to reduce payoff differences across areas. If poor/unskilled workers were completely mobile, the only contribution of education to regional disparities would be through differences in endowments, not payoffs. Second, for the better off and higher skilled individuals, differences in payoffs



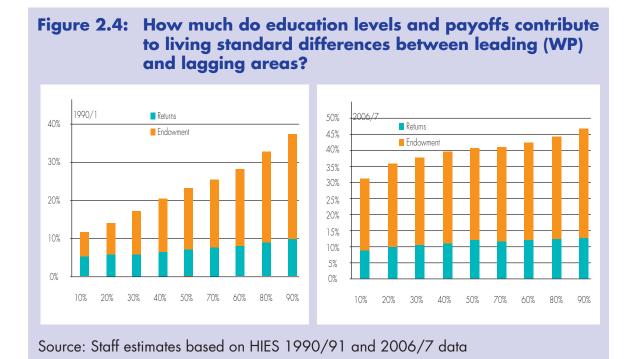


Box 2.1: The virtuous cycle of education and migration in the United States

One of the greatest success stories is in the United States, where a rise in the schooling of African Americans is believed to have been an important causal factor behind the "Great Migration" from the South. In 1900, 90 percent of African Americans lived in the South, and only 4.3 percent of those born in the region were living elsewhere. By 1950, the proportion in the South had declined to 68 percent, and 19.6 percent of those born in the region had moved elsewhere. Census data for 1900, 1940, and 1950 show that better educated people were more likely to migrate because schooling increased their awareness of distant labor market opportunities and their ability to assimilate into different social and economic environments, thus lowering the costs. In another U.S. study of people tracked between 1968 and 1982, those with higher education levels showed less inclination to change professions, but were more likely to move geographically. A person with a college education was likely to move three times more often than a person with a grade 8 education or less.

Opening options for migration stimulates greater human capital investments: people consider not only the local returns to education but also the returns in other locations. If schooling options are available in poor areas, potential migrants will invest in additional human capital, anticipating that jobs in leading areas require higher skills. Employers in those areas are likely to favor educated workers who show themselves as more "able" than other workers from lagging areas. In the United States, African American school enrollment rates were significantly higher in Southern states that previously had experienced high rates of outmigration. An increase in earlier migration rates explains 7.4 percent of the increase in African American enrollment rates between 1910 and 1930. As more African Americans migrated from the South, migration became more common and feasible, and school enrollments rose in response.

Source: WDR 2009.



may reflect gains from agglomeration and specialization. The facts in chapter 1 show that industrial wages in Western Province are twice as high as in all other provinces.

2.2.2 PUSHED IN SEARCH OF PUBLIC SERVICES

46. Although education is an important driver of labor mobility, lack of access to basic public services, such as water and electricity, also influences the migration decisions of many Sri Lankans. An econometric model examines how people decide where to live, taking into account differences in employment opportunities and basic public services between their hometowns or villages and all other districts in the country. Using data from the Sri Lanka Integrated Survey (SLIS) for working-age people between ages 15 and 49, the analysis finds that migration decisions in the 1990s were influenced by district-level differences in access to well water and electricity, particularly for the less educated. For individuals with secondary or less education, a 1 percent difference in the share of well-water coverage between origin and destination increased the likelihood of moving by one-half percent. These differences did not matter for the better educated (table 2.2). Similar evidence is found in countries such as Brazil (box 2.2)

47. Large and increasing differences in the return to human capital suggest that there are increasing, unexploited benefits from labor mobility. Therefore, there is a persistent gap between Western Province and the rest of the country. Those with skills can move to receive these unexploited benefits in Sri Lanka. But when some areas lack basic public services, such as basic water and electricity, this can push people to seek better public services. The move of such migrants may contribute more to congestion costs than benefits from agglomeration.

2.2.3 IMPROVING LIVING STANDARDS IN PLACES LEFT BEHIND

48. Internal migration benefits lagging areas through two main channels: remittance flows and a "wage-pull" effect, as excess lower skilled labor in one area migrates to another. Remittances have contributed to reducing income differentials across provinces. Most migrants maintain strong links with their home communities and send remittances. These remittances help in directly transfering some of the benefits of growth from leading to the lagging areas. In Sri Lanka, foreign remittances have received a lot of attention, especially because of their volume and impact on the country's balance of payments. In 2007, about \$2.5 billion were remitted to the country. CFSES data suggest, however, that domestic remittances are no less important. In 2003–04, domestic remittances on average contributed as much to per capita income as remittances from abroad. Domestic remittances also tended to be more evenly spread than foreign ones.

49. In addition, the data reveal that more than 40 percent of international remittances went to Western Province. Another 22 percent went to Northern and Eastern provinces. In contrast, Western, Central, Southern and North Western provinces all received significant flows of domestic remittances. As noted earlier, Central, Southern, and North Western provinces have large migrant populations in Western Province. The flow of remittances tends to be more equally distributed than non-remittance income. Consequently, remittances reduced income differentials across provinces. The coefficient of variation of non-remittance income (0.33) was higher than that of average per capita income, including remittances (0.30). Regression analysis using the HIES 2001 data suggests that real per capita incomes for households in the lagging (non-western) provinces that receive domestic remittances are on average 10 percent higher than households that do not receive any such remittances.

50. Migration also appears to have contributed to reducing differences in nonagricultural wages across provinces. Migration integrates labor markets. Another way that it can benefit nonmigrants in the lagging regions is through "pulling up" wages in these areas. Information from labor force surveys seems to indicate significant convergence in nonagricultural wages across the provinces between 1992 and 2003. In principle, this could have been brought about either by a movement of capital or labor. But the 1990s saw increasing concentration of manufacturing and service investment in Western Province at the same time that migration was increasing, suggesting that the movement of people rather than capital is likely behind the convergence.

Table 2.2:Differences in access to basic services influences the
decision to move 27

Marginal effects	Primary to secondary educated	Tertiary or above educated			
% difference in well water coverage destination—origin district	0.0054*	0.0020			
% difference in electricity coverage destination—origin district	0.0055*	0.0112			
Number of observations 38,410 1,					
Note: * p<0.01, ** p<0.05, *** p<0.1 Source: Staff estimates using SLIS 2000.					

Box 2.2: Migrating to economic density in Brazil: rational decisions or bright lights?

Of poor men born in Brazil's Northeast—one of the country's lagging areas—20 percent now live in its prosperous Southeast. A large demographic shift occurred from villages to towns and cities in the 1970s, and from towns to cities in the 1990s. Economists have long argued that migration decisions are motivated by the possibility of earning higher wages. But since many migrants do not find jobs after moving, this attraction may be irrational. Some policymakers in developing countries believe that rather than adding to the economy in their new neighborhoods, migrants subtract from them by worsening the problems of livability. This belief has resulted in deterrents ranging from disincentives to draconian regulations to limit the movement of people.

Recent empirical evidence from four decades of Brazilian census data shows something different. Working-age men migrated not only to look for better jobs but also to get better access to basic public services such as piped water, electricity, and health care. Results from models of migration behavior that focus only on the migrant's desire to move in search of better jobs can be biased, because places with better public services also have more job opportunities. Firms like to locate where workers would like to live. By ignoring the importance of public services, some econometric estimates may overstate a migrant's willingness to move in response to wage differences.

To determine how much public services matter, a rich dataset of public services at the municipality level was combined with individual records from the Brazilian census to evaluate the relative importance of wage differences and public services in the migrant's decision to move. Predictably, wage differences are the main factor influencing migration choices. For the better off, basic public services are not important in the decision to move. But for the poor, differences in access to basic public services mattered. In fact, poor migrants are willing to accept lower wages to get access to better services. A Brazilian minimum wage worker earning R \$7 per hour (about US\$2.30 in February 2008) was willing to pay R \$420 a year to have access to better health services, R \$87 for better water supply, and R \$42 for electricity. Poor migrants are rational.

Source: WDR 2009; based on Lall, Timmins, and Yu 2009.

2.3 CONNECTING PLACES AND EXCHANGING PRODUCTS

2.3.1 THE ROLE OF TRANSPORT COSTS

51. The movement of products increases interaction between places and facilitates spatial transformations. Interaction often depends on the cost of transport, which increases with the distance between places, tempered by the quality of the linking infrastructure. There is a long history of using connective infrastructure to lower transport costs and integrate peripheral areas with national markets. In the United States, the Congress passed the Appalachian Regional Development Act in 1965 to integrate the 22 million people in this lagging area, which spans 13 states, with the rest of the country.²⁸ The basic strategy combined regionally coordinated social programs and physical infrastructure. The 1965 Act allocated 85 percent of the funds for highways—seen as

critical to meeting other socioeconomic objectives. Cumulatively, highways accounted for more than 60 percent of the appropriated funds through the mid-1990s. Between 1965 and 1991, total personal income and earnings grew 48 percentage points faster on average in the Appalachian counties than in their economic "sisters," population 5 points faster, and per capita income 17 points faster.²⁹

52. In Bangladesh, the bridge over the Jamuna River opened market access for producers in the northwest around the Rajshahi division. Built at a cost of almost \$1 billion, the bridge provides the first road and rail link between the northwest and the more developed east, which includes the national capital region. Better market access and reduced input prices encouraged farmers to grow high-value crops, such as modern varieties of rice and perishable vegetables.³⁰

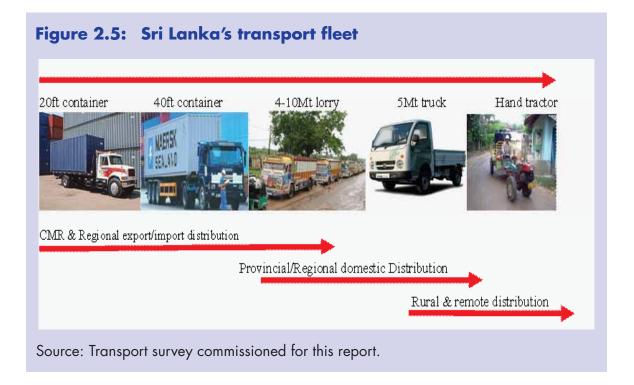
53. Analytical work on economic geography and global experience reported in the 2009 World Development Report on Economic Geography shows that infrastructure is not the only driver of transport costs. Regulation of the transport industry is also important. In France, trucking costs fell by 33 percent between 1978 and 1998 because of the deregulation of the trucking industry (a reduction of 21.8 percentage points) and the lower vehicle costs (-10.9 percentage points). Transport infrastructure (-3.2 percentage points) and declining fuel costs (-2.8 percentage points) were much less important. Scale economies in the transport sector need to be considered carefully because they create monopolistic behavior and circular causation between lower transport costs and greater trade and traffic.

54. How do these insights contribute to understanding transport costs within Sri Lanka? Domestic transport costs are high. A round-trip journey for a 20-foot container between Baticaloa and Colombo, a distance of 330 kilometers, can cost as much as Rs. 110,000—a kilometer cost of Rs. 330, or about \$2.90 a kilometer.³¹ In contrast, a similar journey in the United States costs about \$1.25 a kilometer.³² Why are these costs so high and what can be done to reduce them? Empirical research was carried out to answer these questions and identify the relative contribution of infrastructure quality and demand for transport services. The research focuses on road transport as it is currently the dominant mode of freight transport in Sri Lanka. There are plans underway to enhance the share of freight transported by rail, but as of now, over 90 percent of freight is transported by road.³³ While not addressing multi modal transport is an important caveat, the results from the research should be of considerable relevance in informing transport policy.

2.3.2 ANATOMY OF TRANSPORT COSTS

55. Describing transport prices. Data on road transport prices are not readily available in Sri Lanka, as in many other countries. To capture market variation in transport prices, survey data of actual prices were collected from 15 major shipping "nodes" that facilitate domestic trucking in Sri Lanka.³⁴ In addition to container trucks that specialize in transshipment, domestic distribution of consumer goods and commodities is carried out using lorries that can carry up to 10 metric tons. These vehicles service national and provincial routes connecting major cities and distribution nodes in the country. The third mode of freight transportation consists of informal and small-scale providers who service small villages and remote locations. These vehicles can carry 3–5 metric tons (figure 2.5). The domestic distribution system is a response to constraints imposed by poor road quality and low transport demand in upcountry locations.

56. A sample of transport prices was obtained from 20 informal truckers, 10 formal sector truckers, 5 freight forwarding companies, 2 import companies, and 6 export companies. In almost all cases, transport prices obtained were from Colombo to the nodes and back, representative of the vast majority of Sri Lankan overland shipping. Most of these price data were for formal shipping—20- and 40-foot container trucks, for which prices have a good market equilibrium. Obtaining price data on the informal transport sector, which ships from the major nodes to more rural areas, was more difficult. Data for these areas were based on obtained spot rates. For these informal shippiners, multipurpose vehicles (often small pickup trucks) are used for goods and passenger transportation in small numbers, and



basically are correlated with the cost of fuel for transportation with respect to distance for setting prices. Supplementary data were also compiled from the Association of Container Transporters, the only official source of published transport prices.

57. One of the main findings from the survey data is that there is almost a 10-fold variance in price per kilometer, with congestion creating a high-cost "premium" to ship goods out of the Colombo metropolitan area. Transport prices increase with distance. A round-trip journey from Baticaloa to the port of Colombo costs Rs. 110,000, from Trincomalee to Colombo, Rs. 75,000. Given that Baticaloa and Trincomalee are physically far from Colombo (it takes up to 24 hours by road), these costs are not surprising. But a closer look reveals that transport prices per kilometer are not uniform across locations. Surprisingly, they are very high within the first 20 kilometers from Colombo metropolitan area is clearly visible in figure 2.6. In most cases, rates within the first 20 kilometers of the Colombo metropolitan area are as high as Rs. 1,000–2,000 per kilometer, then drop dramatically (although reaching considerably higher rates per kilometer in steep mountainous areas in Central and Uva provinces), to Rs. 200–300 per kilometer in the Batticaloa and Trincomalee areas.

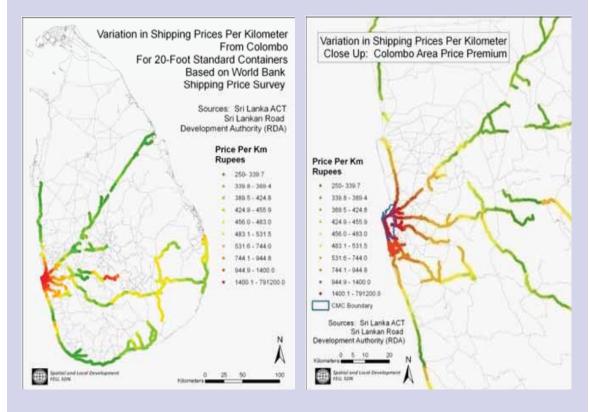


Figure 2.6: Spatial disaggregation of surveyed shipping prices

58. Explaining transport prices. Transport prices are the sum of transport costs, profits, and overhead for the service provider. Transport costs can be disaggregated into vehicle operating costs— that increase with poor infrastructure quality and fuel costs—and indirect costs that include licensing, insurance, and informal payments.³⁵ In addition to these costs, prices are influenced by transport competition. High-demand locations will attract multiple operators, reducing prices. Yet, a few providers servicing remote locations can charge monopoly rents.

59. First, consider road quality. As measured by the International Roughness Index (IRI)—an international measurement of road quality. The IRI measures the variation in road "bumpiness," translated into a quantified index that can be compared universally. In Sri Lanka, more than 50 percent of roads have poor IRI values.³⁶ The RDA maintains multiple databases measuring road quality, including number of lanes, road width and IRI, but data have only been collected for a subset of national and provincial roads. For a sample of Class A and B roads, road width is greater and bumpiness less on major national routes and in the Western Province, while roads are bumpier off of the main routes and in rural areas (figure 2.7).

60. Next, transport demand. The demand for transport services is particularly high in and around Colombo, near major cities, and on major transhipment routes (as from Colombo to Kandy). The left panel of figure 2.8 displays spatial variations in traffic volume, using data measured in 2007 at several hundred locations, while the right panel displays a spatial interpolation of these data to create a continuous surface of traffic volumes. Traffic volumes on national trunk routes, such as the A1, A2, A3, and A4, close to the border of Colombo, are 60,000–80,000 vehicles per day. In contrast, typical traffic volumes on national roads in Uva Province are 1,500 to 2,500 vehicles per day. For secondary or provincial roads, traffic volume in Western Province ranges from 3,000 to 10,000 vehicles per day compared with 100 to 1,000 on local roads. In comparison, average traffic volumes in Uva Province range from 500 to 1,000 vehicles per day on provincial roads and from 100–200 vehicles per day on local roads.

61. Finally, congestion. Locations with high demand for transport services should attract multiple providers, thus lowering transport prices. At the same time, congestion can kick in if infrastructure development and maintenance in these locations does not keep pace with higher traffic volumes. Estimates suggest that high traffic volumes and poor road maintenance contribute to congestion costs of Rs. 32 billion per year in Sri Lanka (about 1 percent of GDP), accident costs of Rs. 12 billion per year (about 0.3 percent of GDP), and economic opportunity costs of Rs. 270 billion per year (7.5 percent of GDP).³⁷ In particular, there are considerable delays of transshipment products moving in and out of Colombo port. Traffic volume decreases by as much as 75 percent as traffic moves outside Colombo. Discussions with transport operators indicate that

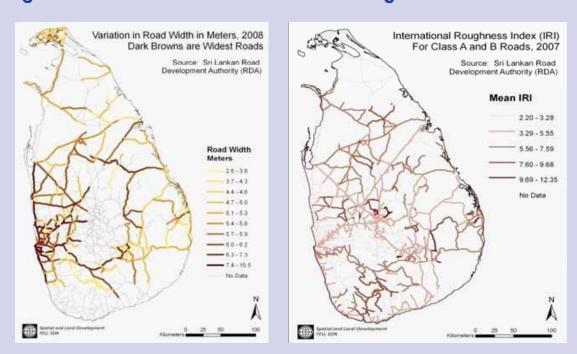
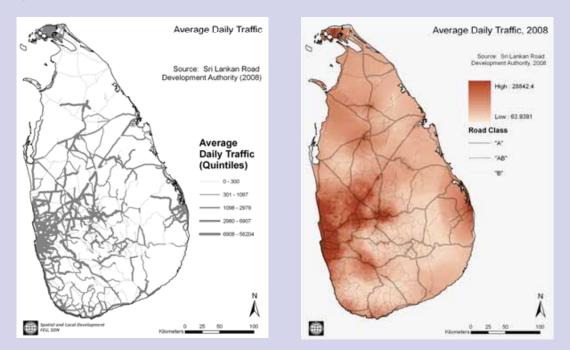


Figure 2.7: Variation in road width and roughness

while container truckers could haul up to three shipments daily from Colombo port to locations outside the city a decade ago (delivering the shipment and then returning for another shipment), by 2009 they average only a single round-trip a day because of excessive pickup delays and congestion. The operators also identify inadequate road capacity and peak hour traffic on Colombo's main arteries as the main contributors to road delays. Significant costs due to restricted times for vehicles entering the Colombo port access road and security delays are also cited.³⁸ While road quality is better in the Colombo metropolitan area, transport prices are high due to congestion costs from inadequate road investment and maintenance and from regulations.

62. A quantitative assessment of the drivers of transport prices was carried out to disaggregate the contribution of "hard" infrastructure, transport demand (market size), and congestion externalities. A Geographic Information System (GIS) was used to derive key variables. For this analysis, the parameter being explained was the price charged by transporters for moving products to Colombo. Data on transport prices were obtained from a survey conducted in Sri Lanka in 2009, and round trip prices were measured from Colombo to several hundred locations. In addition, selected routes from nodes outside Colombo to secondary nodes were also included. For each of these destinations, a GIS was used to determine the optimal route through the road network from Colombo (minimizing travel time and considering variation in road quality and topography) and the total travel distance for that route. The price for that route was divided by the length of the route to obtain an average price per kilometer for each route.





63. A regression analysis was employed to decompose transport prices into the following components (see box 2.3): the "hardware" transit or "friction" cost of moving through the road network; the variation in demand for goods among locations, acting to reduce transport costs through economies of scale and competition; friction from congestion, which adds to cost (in time, vehicle/petrol costs, and so forth) but is separate from the hardware cost; and an interaction term between transit costs through the network and demand. As expected, the results indicate a positive correlation between transport costs (per kilometer) and the hardware parameter. Notably, both the variables proxying demand and congestion effects are significant, and the signs on these variables are as expected: demand is negatively correlated with transport prices due to competition, and demand is also significant and positive indicating that inadequate hardware has a particularly large effect on transport prices in places where there is high traffic volume.

Box 2.3: Decomposing road transport prices – a methodological discussion

The methodology for decomposing road transport prices is grounded in spatial economic analysis and considers network wide transport prices as a function of the physical cost of traveling through the road network, benefits from transport service competition along routes with high trade volumes that can bring down prices and the added costs due to congestion.

Transportation costs are dictated largely by the quality and capacity of the road network, which is measured using a GIS database developed by the RDA on variation in road quality per road segment. This measure is labeled H, representing hardware costs. For each destination route determined by the least-cost path algorithm, travel-times in minutes per road segment were aggregated by the GIS, and then divided by the distance of that route in kilometers to obtain average travel-times in minutes per kilometer. Obtaining actual trade volumes for all locations in Sri Lanka was not feasible; as a proxy route specific demand (D) is measured using traffic volumes. This serves as an indicator for competition as routes with high demand would attract multiple providers. While demand can reduce prices, congestion can increase vehicle operating costs translating into higher transport prices. In the urban economics literature, quadratic forms have been used to model negative effects of congestion (Black & Henderson, 1999) – the quadratic form of traffic volume, as measured by the RDA, is used to capture this negative congestion effect (labeled C).

Thus, we estimate a simple a model where transport prices TP are a function of (a) H = the "hardware" or "friction" cost of moving through the road network (b) D = variationin volume of trade among locations, and (c) C = cost dueto congestion, which adds to time and vehicle/ fuel costs, but is separate from the "hardware"

Decomposing transport prices						
1		Transport price per Km, OLS	Transport price per Km, OLS	Transport price per Km, Robust	Transport price per Km, Bootstrap+	
<i>''</i>	н	6966***	6870***	3411***	3411***	
h :, /	D	-0.0223***	-0.0103***	-0.0101***	-0.0101***	
	с		3.56e- 06***	7.32e- 07***	7.32e-07***	
	HD			33.93***	33.93***	
	Constant	-4683***	-4399***	-2495***	-2495***	
	Observations	1430	1430	1430	1430	
	R Squared	0.279	0.29	0.973	0.973	
	+ Bootstrap estimation using 100 replications *** p<0.01, ** p<0.05, * p<0.1					

cost. In addition, an interaction term HD between hardware costs and demand is included to examine if infrastructure shortfalls are particularly pernicious in locations with high demand. The table in this box summarizes the main findings. As expected, the results indicate a strong positive correlation between transport prices per km and the "hardware" parameter. And after accounting for hardware, demand is negatively correlated with transport prices and congestion has a positive coefficient. These parameters explain about 28 percent of the variation in transport prices. However, the explanatory power of the model jumps to 97.3 percent when the interaction between hardware and demand is explicitly introduced in the estimation. And the interaction term is economically large and statistically significant, indicating that high travel times are costlier in locations where trade and traffic volumes are high.

One of the main applications of this model is in assisting the simulations that highlight the relative benefits of alternate road improvements on transport prices in Sri Lanka. Premium was placed on improving the predictive power of the model, which would improve the reliability of the proposed scenarios. These scenarios are discussed in the next chapter.

Source: Felkner, Lall and Masakarola, 2009

3. POLICIES FOR CONNECTING PEOPLE TO PROSPERITY

64. Chapter 2 of this report examined factors that enhance the spatial efficiency of production—through the transformation of land use, mobility of people, and connectivity of places. This chapter identifies public policy priorities for improving spatial equity in living standards. The WDR 2009 highlights the best way for countries to benefit from spatial efficiency in production and spatial equity in living standards is economic integration. The challenge of economic integration can be seen as reducing the distance between people—especially the poor—and prospering places. The WDR 2009's framework for economic integration includes the following policies:

- Institutions (spatially blind policies). The term is used here to categorize policies that are not explicitly designed with spatial considerations, but that have effects and outcomes that may vary across locations. These policies include the income tax system, intergovernmental fiscal relations, and governance of land and housing markets, as well as education, health care, basic water and sanitation, and other government initiatives.
- Infrastructure (spatially connective policies). The term is used here as shorthand to include all investments connecting places and providing basic business services, such as public transportation and utilities. These investments include developing interregional highways and railroads to promote trade in goods and improving information and communication technologies to increase the flow of information and ideas.
- Interventions (spatially targeted policies). The term is used here to include spatially targeted measures to stimulate economic growth in lagging areas. These measures

include investment subsidies, tax rebates, location regulations, local infrastructure development, and targeted investment climate reforms, such as special regulations for export processing zones.

65. Each of these economic integration policies is directly linked to one driver of geographic transformation. Institutions that bring about common national standards in public services and spatial blindness in human development outcomes can accelerate the pace of people moving toward prospering places. Ensuring basic services everywhere is beneficial for both spatial efficiency and equity. Physically connecting lagging and leading areas with better infrastructure can reduce the costs of transport and increase the movement of products. But ensuring spatial equity in transport coverage can be spatially inefficient if networks are extended to places with few people and there is little demand for transport services. The challenge is in identifying specific investments that improve spatial equity, while not offsetting gains from economic efficiency. Finally, targeted interventions may be needed to change the economic structure of places not picked by market forces, especially if there are severe barriers to the mobility of products and people. But should targeted policies focus on providing incentives to relocate economic activities from where they are concentrated to less dense areas, or should they be concerned about improving the way land changes its uses and users? The rest of this report addresses these questions, using the framework of the WDR 2009 to prioritize how policies can be calibrated to the scale of the challenge of integration facing different areas.

3.1 A PORTFOLIO OF SPATIALLY SHARP POLICIES

66. This section identifies where specific investments will generate the highest payoff for economic efficiency and spatial equity as well as the main considerations for effectively implementing specific policies. Several criteria could allocate public investment across leading and lagging areas. Investment resources could be allocated on the basis of need, with the objective to compensate for the disadvantages of poor regions. In this case, regions with low incomes would receive more investment—though richer regions might also demand more resources to meet needs stemming from congestion. Resources could be allocated on the basis of efficiency, to maximize national income. In this case, regions with a higher rate of return on investment would receive more. Or, resources could be distributed on the basis of equal allocation across regions, regardless of need or efficiency. The assessment of policy options takes these issues into consideration.

3.1.1 BASIC SERVICES EVERYWHERE

67. Moving is most often costly, difficult, and disruptive. Those who move—from villages to towns, between towns and cities, and from lagging to leading areas—are those who have the best opportunities of recouping costs once they are settled in their new location or those who face extraordinarily poor opportunities for themselves or their children in their current locations.³⁹ In terms of labor mobility, broad coverage of adequate basic education and health services serves two important purposes. First, it helps improve the quality of migration. Second, by providing education, health, and social services in economically lagging areas, governments can begin to act on the reasons households are pushed to migrate. Both adequate education and health service coverage enhance the likelihood that migration occurs as a matter of choice, not by force. Labor mobility that concentrates people and talent in locations of choice will contribute more to agglomeration benefits than to congestion. For these reasons, the bedrock of any public policy aimed at facilitating labor movement and agglomeration should be a spatially blind provision of basic public services, especially education and health.

3.1.1.1 EDUCATION ACCESS AND QUALITY

68. As discussed in chapter 1, past policies have been remarkably successful in geographically balancing access to education services. The current challenge is to improve the quality of education in lagging areas and develop skills that help people access opportunities in a transforming economy. Almost 30 percent of students fail courses in their first language and in mathematics in grade 8, and 50 percent fail English. And this performance is worst in Northern and Eastern provinces. Improving the quality and relevance of education will provide people in lagging areas with the ability to enter labor markets in dynamic places. The payoff to education is higher in Western Province, and facilitating labor mobility will contribute to further reduction in national poverty. How can education outcomes become spatially blind?

69. Education services are delivered through a network of providers. The Ministry of Education (MoE) is responsible for operational policies in general education. It administers the national schools, which make up 3 percent of total public schools, 18 percent of total public enrollment, and 15 percent of the teachers. The provincial councils administer the remaining schools. Provincial councils develop education plans and budgets, and employ and deploy education administrators, principals, and teachers at the provincial level. Zonal education authorities transfer and deploy principals and teachers within zones.

70. Sri Lanka has a large and geographically dispersed network of 9,700 public schools with 205,000 teachers. The average school size is about 400 students, with remote districts in the Northern and Eastern provinces having fewer than 250 students per school and with Western Province more than 600. A composite indicator of accessibility developed by the MoE suggests that accessibility is best in Western Province, followed by Southern Province; it is worst in Northern and Eastern provinces is classified as "difficult" or "very difficult." The education system in the Northern and Eastern provinces. Provinces needs priority support to reduce spatial disparities in education opportunities.

71. Significant differences exist in the comprehensiveness of educational services offered. Schools are differentiated by type (in declining order of services provided): National schools; Navodya schools; Type 1AB schools (with advanced level science stream classes); Type 1C schools (with advanced level arts and/or commerce streams, but no science stream); Type 2 schools (with classes only to grade 11); and Type 3 schools (with classes only to grade 5 or 8). About 50 percent of students are enrolled in provincial 1AB and 1C schools. About 30 percent are enrolled in Type 2 schools, and 10 percent in Type 3 schools (these students are considered unlikely to complete secondary and junior secondary school). The proportion of Type 2 and Type 3 schools are highest in populous regions such as the Western and North Western Provinces; by contrast, 50 percent of National school enrollment is in the Western and Southern provinces.⁴⁰

72. Teaching inputs also vary across locations. Sri Lanka averages 30 students for each trained teacher, higher than the ratio of 25 identified in OECD's Program for International Student Assessment as optimal for learning outcomes for 15 year olds.⁴¹ While all provinces have an undersupply of trained teachers, the problem is most acute in Western Province, where there are 36 students for each trained teacher. In addition, Sri Lankan students do not have enough teaching materials. The scarcity of teaching material is particularly acute in rural and estate sector schools. Sri Lanka needs to increase investment in educational material over time, in line with trends in more advanced middle-income countries such as Malaysia and Thailand.

73. Improving teacher quality is a challenge, considering that salaries for teachers in the public sector are low and that the private sector has a limited role in providing education services. A survey across countries shows that Sri Lanka's salary range for teachers is one of the lowest. The starting salary of a primary school teacher, adjusted for purchasing power, is less than 50 percent of the World Education Indicators average. Sri Lanka also has limited private participation in education. Private schools for grades 1–9 have been restricted since 1960. Although since 1990 a private university-level institution could be established, the size of the private higher education sector is still underdeveloped.

Currently, there are 93 private schools educating fewer than 3 percent of students, and growth has been modest. Most enrollments in private schools are in Colombo (50 percent) and in Gampaha (15 percent).⁴²

74. Improving the quality of education involves making resource allocation choices. Expenditures for general education (primary and secondary) increased by only 10 percent between 2005 and 2008 (in nominal terms) , while expenditures in tertiary education increased by 7 percent during the same period (table 3.1). Sri Lanka underinvests in education by international standards. Over time, the country needs to increases investment in education by attracting more private investors and by raising public investment.

75. A benefit-incidence analysis was carried out to examine how public expenditures in education benefit the poor compared with the rich, and between lagging and leading areas. The analysis draws on province-level data on recurrent expenditures on education and enrollment rates that are merged with household data from the HIES 2006-07. Data on education expenditures are based on estimates from this study and disaggregated by level of education using criteria in World Bank (2005b). The benefit-incidence analysis

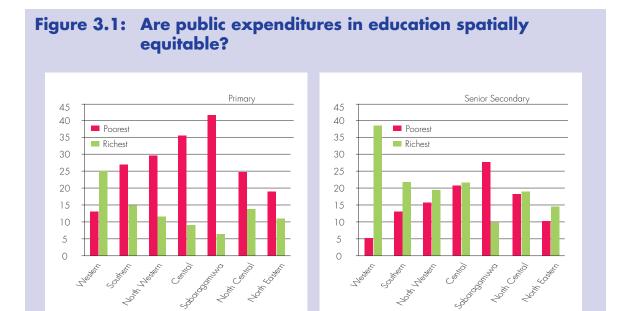
(Rs. million)				
Agency and level of education	2005	2006	2007	2008a
General education	40,499	46,275	52,057	45,008
Ministry of Education	13,396	13,653	16,988	13,114
Department of Examinations	594	717	665	851
Department of Education Publications	10	10	16	34
Provincial councils	26,499	31,895	34,388	31,009
Tertiary education	10,092	8,768	9,423	10,778
National Education Commission	12	21	31	49
Total expendituresb	51,745	68,293	63,792	58,583
Provincial councils share (%)	51.2	46.7	53.9	52.9
Education expenditures (% of GDP)	3.1	3.3	2.9	2.5
Education expenditures (% of government expenditures)	7.9	9.3	8.6	7.7

Table 3.1:Public spending on education by level and providers
(Rs. million)

a Provisional figures for 2008.

b Assistance in education is not included in the estimates. In 2007, this figure is Rs. 8 billion, and the share of province decreases slightly.

Source: Data are reported in 2002 Rupees. Team calculations based on data from MoE, Ministry of Provincial Council, and local government. Budget estimates and Central Bank.



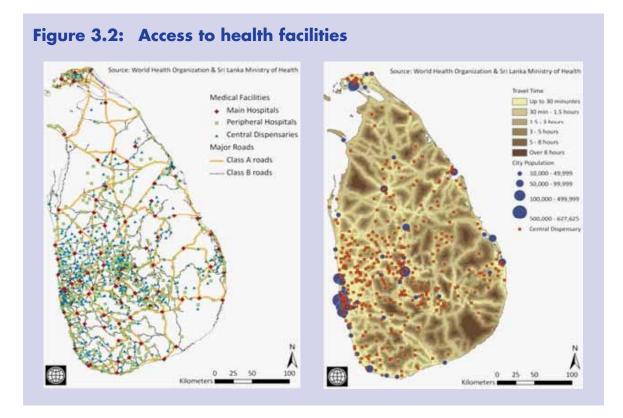
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Source: Hon 2009 background paper for this report.

shows that primary and secondary education subsidies were pro-poor in all provinces outside Western Province (figure 3.1). Furthermore, the poorest 20 percent benefited more from subsidies to primary education compared with subsidies to secondary education. In contrast, a higher share of subsidies for senior secondary and tertiary education benefits the rich, both in leading and lagging areas. This evidence is similar to countries such as Brazil. In other countries where the private sector is present in university education in a substantial way, those who can afford to pay can opt to send their children to private universities. In Sri Lanka the private sector needs to be encouraged to expand its involvement in higher education, with the state making arrangements for quality assurance.

3.1.1.2 QUALITY OF HEALTH SERVICES

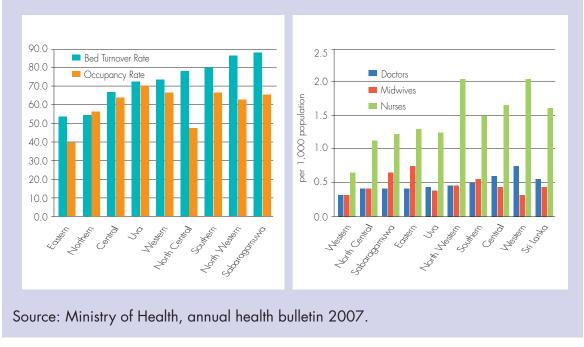
76. Universal coverage of basic health services is necessary for long-term development. Public health care in Sri Lanka is provided primarily by the Ministry of Healthcare and Nutrition and the provincial councils. Major municipalities provide limited services. The public health care system consists of a network of 610 hospitals, and 418 central dispensaries and maternity homes throughout the country.⁴³ Most Sri Lankans have access to a health facility within 30 minutes of where they live (figure 3.2) and are within 1.4 kilometers of a basic health clinic and 4.8 kilometers of a government-sponsored free health care facility.44



77. Sri Lanka's health service coverage is impressive. Its 3.4 beds per 1,000 people is high compared with other middle-income countries, with little variation across areas. But services are often underused. The average bed occupancy ratio is 60 percent, significantly lower than the 80–85 percent suggested by international healthcare advocates. Underuse is particularly severe in the Eastern, Northern, and North Central provinces (figure 3.3). Part of the reason is variation in the distribution of key health personnel. Mullativu and Killinochi in Northern Province have the lowest health personnel-to-population ratio for doctors, midwives, and nurses; Colombo has the highest. By contrast, the average bed-turnover ratio of 80 percent is at the level of international norms, suggesting that Sri Lanka is efficient in servicing inpatients. Yet the ratio varies significantly, from less than 60 percent in Eastern and Northern provinces to 90 percent in North Western and Sabaragamuwa provinces.

78. Medical facilities are provided through a multi-tiered system. The tertiary tier which consists of higher level hospitals (teaching hospitals and special hospitals) provide specialist care and general medical services including inpatient care, investigative and laboratory services, long term clinic care and outpatient care. Secondary level hospitals (Provincial and District General Hospitals and Base Hospitals) have fewer specialists and also provide inpatient care, selected investigative services, long term clinic care facilities (Divisional Hospitals, Central dispensaries, maternity homes), are only staffed with general medical officers.⁴⁵ All tertiary level

Figure 3.3: Many health facilitates are underutilized, partly due to shortage of health personnel

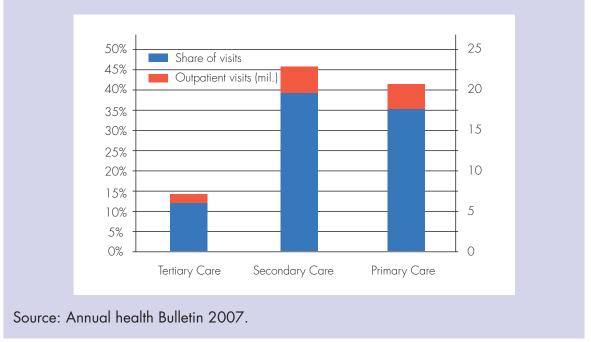


hospitals are managed by the Central MOHN while the majority of second tier facilities are run by provincial councils.⁴⁶

79. All lower level primary care facilities are provincially run. In addition to the services provided through the medical facilities, preventive health services are provided by a geographically demarcated Medical Officer of Health Areas. All (324 in 2007) such preventive health units are managed by the respective provincial councils. These units are staffed by field based preventive health staff consisting of Public Health Inspectors, Public Health Nursing Sisters, Public Health Midwives, School Dental Therapists, and field officers, providing maternal and child health, family planning services, occupational and environmental health services, school health and dental services.⁴⁷ Outpatient care is primarily provided through outpatient departments in hospitals. The public system accounts for 95 percent of inpatient admissions and 60 percent of outpatient visits and nearly 100 percent preventive health services.⁴⁸

80. Services are often underused in the secondary tier of hospitals run by provincial councils. Patients often have the perception that they should seek the highest possible level of care, leading them to bypass these hospitals and facilities to seek care directly at nationally run hospitals because they provide free services including more specialist services. For example, 90 percent of babies are delivered in the higher level facilities under specialist care, with more than a third in teaching hospitals. Fewer than 5 percent are delivered in maternity homes or divisional hospitals.⁴⁹ People often bypass primary

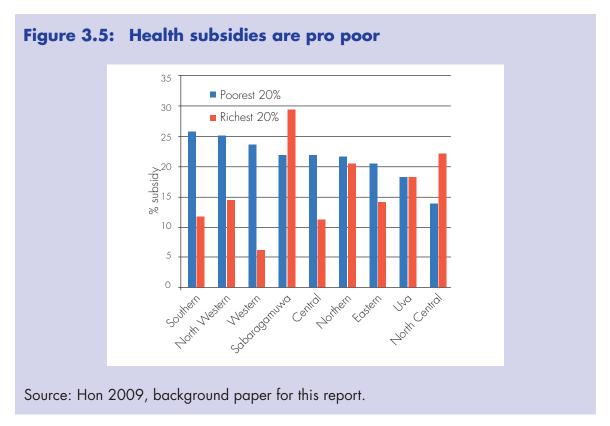
Figure 3.4: Many people bypass primary care facilities for basic outpatient visits



care facilities for outpatient visits (figure 3.4). For instance, while there were 17.6 million outpatient visits to primary care facilities in 2007, 19.4 million outpatient visits were recorded in secondary care facilities. In addition, there were 5.8 million outpatient visits to tertiary care facilities.

81. Facilities in remote areas also find it difficult to retain specialist doctors, general medical officers and nurses. This is partly because personnel tend to apply for centres in the Western Province as they progress in seniority within the sector. The prospects of supplementary income from practicing in the many private clinics and hospitals, as well as consumer amenities such as better schools are among the contributory factors. About 50 percent of the 8,650 private hospital beds are available in Colombo; the rest are distributed across Kandy, Galle, Kurunegala, and Anuradhapura districts.⁵⁰ While a third of these clinics are operated by full-time private general practitioners, the rest are staffed by government medical doctors who are permitted to conduct private practice only in their off-duty hours.

82. The current health system has many areas where efficiency can be improved and potentially reduce healthcare system costs. Excess demand has resulted in overcrowding and long waiting lines in higher level hospitals. But health services are quite equitable because poor people can seek care at any facility free-of-charge. A benefit-incidence analysis across people and provinces highlights that health subsidies are pro-poor, particularly for hospital outpatient services (see box 3.1). Across the country, the



poorest 20 percent received their fair share of health subsidies; and the richest 20 percent received 17 percent of subsidies. This picture however varies considerably across provinces. Western Province is the most pro-poor. Twenty-five percent of subsidies went to the poorest 20 percent, and 5 percent to the richest (figure 3.5). By contrast, Sabaragamuwa's richest 20 percent received 30 percent of the subsidies. But the poorest 20 percent in Sabaragamuwa are less worse-off than in North Central Province, where the poor received less than 15 percent of health subsidies. In summary, this analysis suggests that while health services are geographically dispersed and reach the poor, there are significant inefficiencies due to underutilization of facilities.

3.1.2 PHYSICALLY CONNECTING LAGGING AND LEADING AREAS

83. The government's strategy for national development as outlined in the Mahinda Chintanya, considers improvements in infrastructure of paramount importance to reduce transport prices and improve the physical connectivity of peripheral and isolated areas. The centerpiece of the strategy consists of investments that improve infrastructure across the country—roads, railways, telecommunications, and ports. While increasing spatial equity in coverage of durable infrastructure is appealing, such decisions need to be grounded in an assessment of how these improvements can improve accessibility of peripheral areas and whether alternate improvements have a higher likelihood of improving accessibility as well as performance of the entire network. Thus, can strategic investments generate win wins for both spatial equity and economic efficiency?

Box 3.1: Spatial benefit incidence of health subsidies

In 2002, Sri Lanka established a system of national health accounts that provides comprehensive data on expenditures by source of funds, provider, function, and province. The Sri Lanka National Health Accounts complies with the statistical standard for health accounts developed by the OECD and includes both public and private expenditures. Indeed, Sri Lanka is one of the few low middle-income countries with this capacity.

Micro data from the Central Bank's Consumer Finances and Socio-Economic Survey Report were used to estimate public healthcare use across individuals by income quintiles. That report was used for the following reasons. First, use of health services was available (that is, self-medication, inpatient or outpatient, and source of treatment; public, private, traditional, or western) along with a measure of living standards. Second, the report distinguished between public and private care. Third, it included data on location by province. Fourth, a 14-day recall period for healthcare use was long enough to produce a sufficient sample of observed users. The living standard measurements were the adult equivalent per capita consumption of expenditure. Combining the use rates and the living standard measurements obtained above with public health expenditure estimates from the national health accounts, the subsidies by location, service, and quintile were calculated.

Source: Hon 2009, background paper for this report

84. The analysis of transport prices discussed in the previous chapter is used to inform these choices by simulating the implications of alternate road improvements. These simulations illustrate the utility of spatially explicit tools in differentiating the potential benefits of targeted investments in lagging areas relative to those that improve connectivity among places with demonstrated economic potential and large local markets. These simulations do not provide a blueprint for developing a comprehensive operational road investment program, which would require a more detailed study that would look at the interplay of different modes of transport (e.g. rail) as well as consider multiple objectives that are being addressed with transport policies. These objectives may include improving accessibility to basic services such as schools, clinics, and local markets.

85. The simulation exercise builds on the approach used by government road departments or international agencies, which use economic rate of return models considering the economic impact of a potential road improvement on the cost of vehicles traversing that particular road segment, or on economic impacts of cities and towns immediately "upstream" or "downstream" from the improved road segment.⁵¹ The methodology used here considers network-wide impacts of improving specific transport corridors, explicitly accounting for the effects of transport demand and congestion on transport prices. Reductions in transport prices in one location can come from investments made in another as well as policies that enhance competition in the transport services market. The approach is described below:

- a. A "baseline" estimate of average transport prices for each DSD was simulated first assuming no change to the 2008 Sri Lankan Class A and B road network. The results for each subsequent scenario were evaluated in comparison to this baseline estimate.
- b. The largest city in each DSD was used as the starting point, and transport routes to Colombo were calculated using a least-cost path algorithm and optimizing the route to minimize the transport/congestion cost variable. The "least-cost" pathway through the road network, minimizing travel-times as a function of road quality, capacity and topography, was re-estimated for each simulated scenario (reflecting road network changes).
- c. Using the new routes based on the simulated road network improvements, aggregate and per kilometer values per route for the H, D, C and HD parameters were recalculated calculated for each DSD (section 2.3).
- d. Using these updated values for the explanatory variables, the values for transport prices from Colombo to each DSD were predicted out-of-sample based on the parameter estimates from regression model in the previous chapter.
- e. While these predicted prices have significant spatial variations across the country, they do not tell us what is actually being spent on transport on a daily or annual basis. For that we need to consider transport volume, which varies tremendously depending on the route and city. Consequently, the simulated average transport price per kilometer for each scenario, for each DSD, was multiplied by the corresponding traffic volume (ADT). This provides a measure of daily expenditures on transport for each DSD for each scenario, which is the main parameter for examining aggregate benefits of alternate improvements.

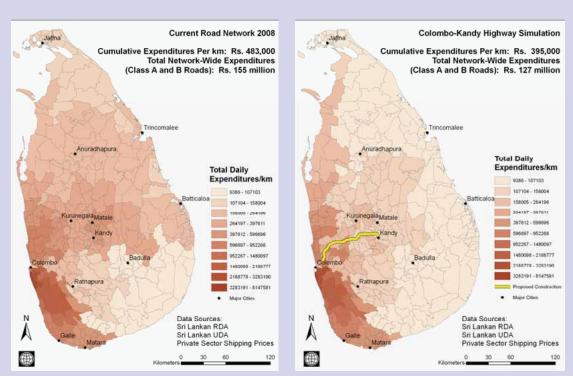
86. The simulations consider implications in terms of transport prices resulting from a selected number of road improvements proposed by the Road Development Authority (RDA). Road improvements for each scenario were physically created or upgraded using a GIS. Estimates of travel times on those segments (as a function of road quality, topography, and number of lanes) were adjusted to reflect their future improved status. New traffic volumes along those new or improved routes were estimated by multiplying current traffic volumes times a scalar in the case of improved road segments, and by estimating volumes on new road segments by spatial interpolation of volumes from nearby routes of similar quality and number of lanes. Each simulation derives networkwide effects beyond the immediate area of their upgrade or construction. For example, the Colombo–Kandy Expressway will also reduce transport prices along roads crossed by the expressway. The following road improvements /constructions were simulated:

- **Baseline scenario: Current (2008) Road Network.** Network-wide transport expenditures are computed using the current network of A and B class roads.⁵²
- Scenario 1: Colombo Outer Ring Road. Because of Colombo's unique position in Sri Lanka, handling 95 percent of Sri Lankan imports and exports, roads providing access to Colombo port are crucial in managing countrywide transport prices. The RDA has proposed building an outer road (ring road) of 30 kilometers through the periphery of the greater Colombo metropolitan area to handle heavy city congestion and to cater to the extremely high shipping volumes in and out of Colombo.
- Scenario 2: Colombo–Katunayake Highway. This major highway upgrade stretches 26 kilometers from Colombo to Katunayake. Given Colombo's high congestion and transport volumes, this project is seen as a way to improve most of the traffic and shipping heading north.
- Scenario 3: Kandy Expressway. The RDA has proposed a major new expressway—completely new road construction—running parallel to the existing road linking Colombo with Kandy. A massive investment, the expressway would greatly improve road connectivity between the two largest economic urban centers in Sri Lanka, which would almost certainly be needed to meet the growing shipping volume and traffic between these economic centers.
- Scenario 4: Katunayake–Anuradhapura Expressway. The RDA has proposed an improvement in the connectivity between Colombo and the north of Sri Lanka. This new highway features 65 kilometers stretching north from Katunayake, and then 80 kilometers of highway upgrades to Anuradhapura.
- Scenario 5: Southern Highway. Like the Kandy Expressway, this new highway stretches south from Colombo to Matara. This new highway will travel through very high traffic volume areas, linking Colombo to the south of Sri Lanka.
- Scenario 6: Improve Connectivity to Poor Areas. This scenario is not proposed by RDAs, but is included here to simulate the effects of linking some of the poorest areas in the country (Uva Province) with the intermediate hub in Kandy.
- Scenario 7: Upgrade High Traffic Volume Areas. This scenario upgrades the highest traffic volume areas in Sri Lanka, particularly the Colombo metropolitan region. Scenarios 1 and 2 are complemented by additional upgrades near Kandy and in the Batticaloa area, which includes 30 kilometers of new road construction and 209 kilometers of upgraded road.

3.1.2.1 ASSESSMENT OF ALTERNATIVE SCENARIOS

87. For each simulated road improvement described above, the simulations measure the savings in transport expenditures relative to the baseline with no improvements. Transport expenditures are calculated as the sum of transport prices times volumes across all segments in the road network. Total transport expenditures in the baseline case are illustrated in the left panel figure 3.6, which are estimated at Rs. 155 million per day across Sri Lanka's network of A and B class roads. As expected, aggregate transport expenditures are highest around Colombo. This is due to a combination of relatively high transport prices per kilometer from inadequate infrastructure and congestion, and high traffic volumes which means that a large number of vehicles face these costs. The right panel in figure 3.6 shows total transport costs after the construction of the Colombo-Kandy highway, which the model predicts would result in large reductions in aggregate transport expenditures. Island-wide expenditures on transport will decline from Rs. 155 million a day to Rs. 127 million, a reduction of Rs. 28 million.

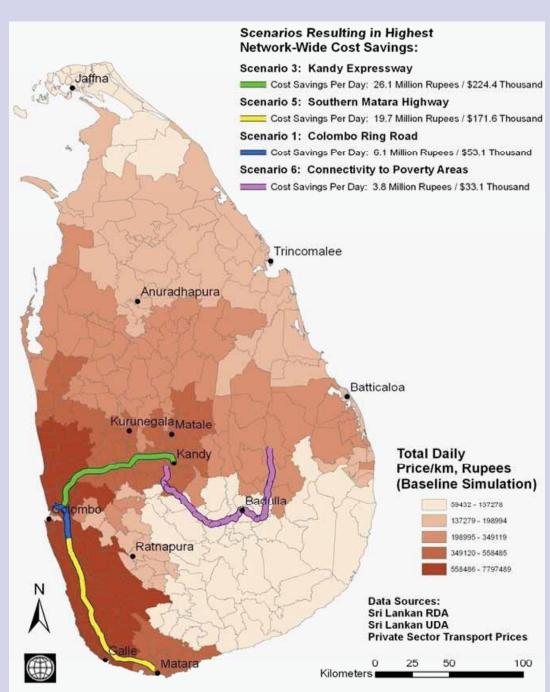
Figure 3.6: Simulated network-wide change in total transport expenditures from the construction of the Colombo-Kandy Expressway



Source: World Bank staff calculations, see Felkner, Lall and Masakorala (2009); Note: The routing of the proposed Colombo-Kandy Highway is purely illustrative. 88. Simulations of the remaining 5 proposed road improvements suggest that the Southern Highway, which is already under construction, has the second largest impact on total transport expenditures, which is reduced by Rs. 20 million per day. In comparison, upgrading roads in major cities (high-traffic areas) provides the greatest return in terms of reducing network-wide transport costs per kilometer. But they do not generate the highest reductions in overall expenditures on transport. For example, the model estimates that upgrading roads in large cities such as the Colombo outer ring road will reduce transport costs by Rs 10 per km, but daily transport expenditures only reduce by Rs. 6 million. It is however, the third best option for reducing overall transport expenditures. These options are shown in figure 3.7. The limited performance of upgrading roads in major cities (high-traffic areas) has more to do with traffic volumes, which are the highest along the Colombo-Kandy and Southern corridors. As a consequence, smaller unit price reductions can translate into larger savings on what consumers pay for transporting products. Similarly, the road from Badulla to Kandy (poor-area connectivity) also fares well in reducing costs per kilometer, but connects a small transport market. So, overall reductions in transport expenditures are small.

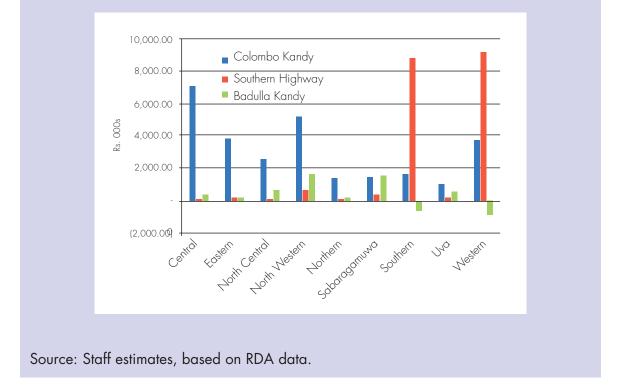
89. Which transport improvements can benefit poor areas the most? One of the main insights from the analysis is that transport expenditures in poor areas can be reduced by improving market access in intermediate areas, rather than in the poorest and remotest areas. Of course, improving transport connections between Kandy and Colombo directly benefits a large number of poor people because the central province has a high concentration of poor people. The simulations suggest that the Colombo-Kandy expressway can reduce transport costs in the province by Rs. 22 per kilometer resulting in overall transport savings of Rs. 7 million per day. In fact, this link effectively connects "mountains of poverty" to "peaks of prosperity" (figure 2 in executive summary and figure 3.8). Equally important, is that the Colombo–Kandy Expressway not only reduces transport expenditures in Central Province, it also reduces daily transport expenditures in the Eastern, North Western, and Uva provinces by Rs. 3.8 million, Rs. 5.1 million, and Rs. 1 million, respectively. In contrast, the hypothetical Badula–Kandy road improvement reduces daily transport expenditures in Uva Province by only Rs. 580,000. Clearly, the Colombo-Kandy Expressway, linking Western Province with Central Province, is a winwin situation for economic efficiency and spatial equity (figure 3.8).

Figure 3.7: Transport expenditure savings from simulated road improvements



Source: Staff estimates based on data from RDA and survey of transport prices. Details in Felkner, Lall and Masakarola 2009. Routings are purely illustrative.

Figure 3.8: Province specific transport expenditure savings of alternate road improvements "not only does the Colombo-Kandy Expressway reduce transport costs island-wide, it connects the most poor people to prosperity"



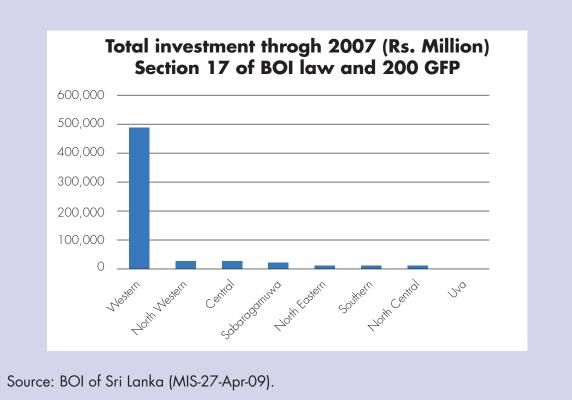
3.1.3 TARGETED INTERVENTIONS IN SELECTED CASES

90. When countries face divisions caused by ethnolinguistic or religious heterogeneity, the forces of factor mobility are weakened even across relatively short distances. Spatially focused interventions may need to complement institutions and infrastructure to encourage economic production in lagging areas. The Northern and Eastern provinces of Sri Lanka have emerged from decades of conflict, which slowed the voluntary movement of labor and dampened interregional trade. As these provinces integrate with the rest of the country, the need for common institutions will be critical. But targeted interventions will also be needed to overcome historical divisions. Separating what works from what does not is important for improving the effectiveness and efficiency of targeted policies. Section 2.1 showed that improving the fluidity of agrarian land markets is central for economic transformation and poverty reduction in lagging areas. But can targeted interventions increase the pace of transformation, particularly in Eastern and Northern provinces?

3.1.3.1 INDUSTRY RELOCATION INCENTIVES

91. Targeted interventions today aim at relocating economic activities from the concentrated Western Province to lagging areas throughout the country. They run the risk, however, of slowing economic progress because workers and firms earn higher returns when located close to the international gateway and similar businesses. As firms value gains from proximity, few are taking up relocation incentives. Incentives are offered by many government agencies such as the Ministry of Finance (MoF), Board of Investment (BOI), Export Development Board (EDB), Ministry of Industries (MoI), and other line ministries. In many cases, implementing agencies do not coordinate their programs and inadvertently offset the efforts of their counterparts.

Figure 3.9: Western Province dominated the location of investments



92. Consider the BOI, which operates as an autonomous statutory body directly responsible to the President, with a Board of Directors of eminent officials from the private and public sectors. Regulations framed under Section 17 of the BOI Law grant specific incentives to new and existing enterprises satisfying specific eligibility criteria, which currently include tax holidays, concessionary corporate income tax rates, generous depreciation allowances, and import duty and excise exemptions.⁵³ These incentives usually include exemptions covering income tax, customs duty, and foreign exchange

controls. While the BOI currently offers spatially targeted incentives to stimulate growth in lagging areas, its initial mandate was to use incentives as instruments of national economic development and attract foreign direct investment (FDI) into economic processing zones (EPZs), based mostly in Western Province. EPZs, such as Katunayaka and Biyagama, have grown over the last few decades in number of zones, employment, and share of exports.

93. Evaluation of BOI and 200 Garment Factory Programme (GFP) under the projects approved shows that Western Province dominated the location of private investment (figure 3.9). At the end 2007, Western Province had attracted the highest volume of investment, and generated the most jobs and exports. Overall, total investment in Western Province was valued at Rs. 484 billion, with service infrastructure contributing Rs. 333 billion. Exports of Rs. 460 billion along with 300,000 jobs were created with the support of BOI's incentive programs. 32,500 of these jobs came from the 200 GFP. The second highest number of incentives was in neighboring North Western Province (Rs. 29 billion), of which nonmetallic products contributed Rs. 11 billion. Total export value was about Rs. 40 billion, of which textile, wearing, apparel and leather products contributed Rs. 29 billion with Rs. 5 billion from the GFP. And 39,512 jobs were created under these incentives, including 16,051 under the GFP. But these incentives have not attracted investors to the country's lagging areas. New investments attributable to these incentives are only Rs. 3 billion in Uva Province and Rs. 13 billion in Northern and Eastern provinces, and even those were concentrated in the urban areas of Ampara and Tricomalee.

94. Incentives under the 300 Enterprise Development Programme, or "Nipayum Sri Lanka," a flagship program established in 2006 to support rural employment creation in lagging areas, are disproportionately used at the edge of Western Province, not in remote areas. Sectors are identified and prioritized based on comparative advantage, and depending on the conditions of each province—nondifficult, difficult, and most difficult—incentives are adjusted to accommodate location-specific political and economic risks (BOI Annual Report 2007).

95. This program attracted 153 projects through the end of 2007.⁵⁴ Foreign investment of Rs. 20 billion and domestic investments of Rs. 24 billion have been approved. Most of these projects specialize in agricultural value added and in apparel, expecting to generate 44,000 jobs. While these developments may appear promising for industrial deconcentration, a closer look at the geographic distribution of investments tells a different story. Investments of more than Rs. 21 billion were approved in North Western Province, which lies at the border of Western Province. While industry location may be influenced by incentives, these favor places that help producers maintain favorable access to markets and their suppliers. These incentives have decentralized private investment to remote locations.

96. The limited success in attracting firms to lagging areas is partly due to relocation costs that are higher than the benefits of staying in larger, often congested agglomerations. Many firms reported being locked in spatially, depending on nearby firms, for information on business processes, regulations, and hiring practices. And being in a larger agglomeration provided access to a pool of qualified workers and business services not easily available in peripheral areas. Rather than offering incentives to "push" industry to lagging areas, policymakers should invest in information to identify what investors perceive as opportunities and constraints to help sharpen the impacts of targeted incentives.

97. Public policies are staring to recognize that economic growth will be unbalanced. The national physical plan (NPP) takes into account that higher value economic activities will be geographically concentrated and identifies five metro areas that are likely to become economic engines in the next 20 years (see box 3.2). However, the NPP does not provide guidance on why and how economic growth will pick up in these areas. It may be useful to invest in information to identify area specific sources of comparative advantage (see next section).

3.1.3.2 KNOW THY ECONOMY-INVESTING IN INFORMATION

98. Improving the function of agrarian land markets provides a starting point to facilitate economic transformation in lagging areas, but additional efforts may be needed in areas where the costs of economic distance are compounded by internal divisions. Eastern Province is one such area. It was ravaged by civil war for more than 20 years, and its coastal regions devastated by the 2004 tsunami. Annex 1 provides some details on the Negenahira Udanaya (Eastern Revival), the main government program to integrate Eastern Province economically with the rest of the country. The economic future of Eastern Province is unlikely to be in industrial manufactures. Even historically, manufactures have not been an important part of the local economy. By contrast, there are considerable opportunities for increasing agricultural production and enhancing links with nonfarm activities. A promising prospect is the readiness, even eagerness, of two big agribusiness firms, Chemical Industries Colombo PLC (CIC) and Hayleys, to expand operations in Eastern Province (see Rodrigo 2009 for details). They are keen to acquire and deploy large-scale best-practice technologies. These include silo fabrication, grain drying, milk processing, and other food-processing technologies that could raise output, productivity, and product range while reducing spoilage. The efforts of such firms have a high probability of success because of the accumulated experience they bring to food processing, marketing, and exporting.

Box 3.2: The National Physical Plan

In 1997, the Presidential Task Force studying urbanization recommended that a National Physical Plan (NPP) be developed for Sri Lanka. In 2000, a high-level National Physical Planning Council (NPPC) chaired by the President was established to guide and eventually operationalize the NPP through an amendment to the Town and Country Planning Ordinance No. 13 of 1946. The NPP was completed in 2007, and approved by the NPPC on July 3 2007. The stated objectives of the NPP are to (i) protect the environment, (ii) ensure that all Sri Lankans live in areas safe from natural disasters, (iii) create a strong network of cities, towns and villages (iv) provide infrastructure facilities, (v) and balance production and protection.

Consistent with the argument in this report, the NPP explicitly recognizes that economic development is inevitably going to be geographically unbalanced. Higher value added economic activities have a "natural" tendency to concentrate. The NPP calls these areas "Metro Regions" and identifies five such areas (see box map). The NPP projects that Sri Lanka will see rapid urbanization in the coming 20 years. It is projected that 70 percent of Sri Lankans will live in urban areas by 2030, of which 80 percent will live in the five metro cities and smaller district capitals. Some urban areas are projected to experience explosive population growth. For example, the population in the city of Hambantota is expected to reach 1 million by 2030. In the 2001 census the population was recorded at about 21,000. Conversely, the NPP projects that the population of Kandy one of the few areas with concentration of economic activity outside the Western Province (see box map) will shrink between now and 2030.



However, the NPP does not assess the drivers of demographic and economic transformation. For example it is not clear whether and why the Trincomalee-Anaradhapura-Dambulla (TAD) triangle will eventually have the same density as Colombo. The reported population numbers suggest rapid convergence as the TAD triangle is expected to have 4 million people by 2030 compared to Colombo's projected 5 million people. And the NPP does not identify the economic factors driving this rapid concentration. This may limit the extent to which the NPP can be used as a guide for prioritizing infrastructure investments. As argued elsewhere in this report the general lesson from international experience is that policy makers should leave it to firms and households to decide where to locate production and live, while focusing public policies on facilitating the pace with which transformations take place.

Source: Report team based on National Physical Plan

99. CIC, through its subsidiary CIC Agribusiness (Pvt) Ltd., has launched a joint venture with state-owned Mahaweli Livestock Enterprises to establish milk processing facilities at Welikanda and Punani. With an investment of Rs. 550 million, the objective is to produce 10,000 liters of milk per day and move into value-added products (yogurt, cheese, and so forth) within two years. CIC is also engaging in a banana exporting project near Kantale River in Eastern Province in partnership with a leading Japanese fruit supplier. The investment, worth Rs. 500 million, will develop 15,000 acres of land and is expected to generate Rs. 5 billion in export earnings annually, primarily to markets in Europe, the United States, and the Middle East and Gulf states.

100. Hayleys, a major conglomerate, has since the late 1950s been a supplier of agricultural inputs. It is also a major exporter of agricultural products and some manufactures. Hayleys has maintained its presence in Eastern Province through its wide extension network; it trains farmers in crop protection, fertilizer, and machinery use, and provides seed paddy. A pilot project, supported by USAID, gherkins, jalapeno peppers, and pineapple on 50 hectares. Hayleys is planning to extend this project to 650 hectares in former conflict areas around Batticaloa, Amparai, and Bibile. It also plans to set up model farms and negotiate buy-back arrangements with other private producers, entering 50–50 investment sharing deals. Hayleys has a matching grant of \$6 million for this project. Some produce will be developed into final products for external markets, following a value-chain analysis. It does not expect to move up the value chain for the local market; instead, produce will be sold to Cargills, a leading domestic retailer.

101. There is a long tradition of fishing in Eastern Province. In the 1980s–90s, a third of families in the province engaged in fishing. Until the mid-1980s, itinerant fishermen from other parts of the country controlled the marine fishing market. They came to Eastern Province during the southwest monsoon and used local labor. With increasing use of mechanized craft, which makes all-season fishing possible, this practice declined. Today, the sector is divided broadly into marine fishing and inland fishing, which includes aquaculture of high-value fish, such as prawns in fresh and brackish water. Marine fishing is separated into coastal fishing and deep-sea off-shore fishing, in which vessels venture out to sea for many days at the time. In recent years, marine fishing of all kinds in Eastern Province has been severely curtailed for security reasons. Fishermen are allowed out for a few hours a day, mostly at times not conducive for effective fishing. This situation is still prevalent. Because of this restriction, marine fishing has declined significantly from its high of 255,000 metric tons in 2002.

102. What are the operational implications for designing and implementing targeted interventions? International evidence and the Sri Lankan experience highlight the following priorities:

- Targeted interventions should not smother market signals on where businesses want to locate and expand production. Policies should support places with demonstrated potential—not divert growth to other locations. This will increase the pace of national economic transformation.
- In places left behind by market forces, policies should create the foundations for economic transformation—by first improving the efficiency with which the same piece of land changes uses and users.
- In lagging areas that suffer from internal division, targeted interventions may be necessary to support economic progress. But these interventions should be based on careful assessment of area-specific natural, human, and infrastructure endowments, and should not inadvertently offset gains from common institutions.

3.2 TAILORING POLICIES TO AREA SPECIFIC CHALLENGES

103. Policies for economic integration can connect between people in lagging areas with prospering places. But the integration challenge is not the same for all areas in Sri Lanka. A taxonomy can be created by using the spatial dimensions of distance, density, and division to characterize different areas (see box 1.1, p. 2), to focus on how Sri Lanka can tailor integration policies to the challenges faced by different areas. In some places, the density of people in lagging areas, particularly the poor, can compound the challenge of economic distance. In other places, language, ethnicity, or religion may divide one part of a country from another, effectively reducing market forces of migration and interregional trade. How can areas be classified along the dimensions of distance, density, and division?

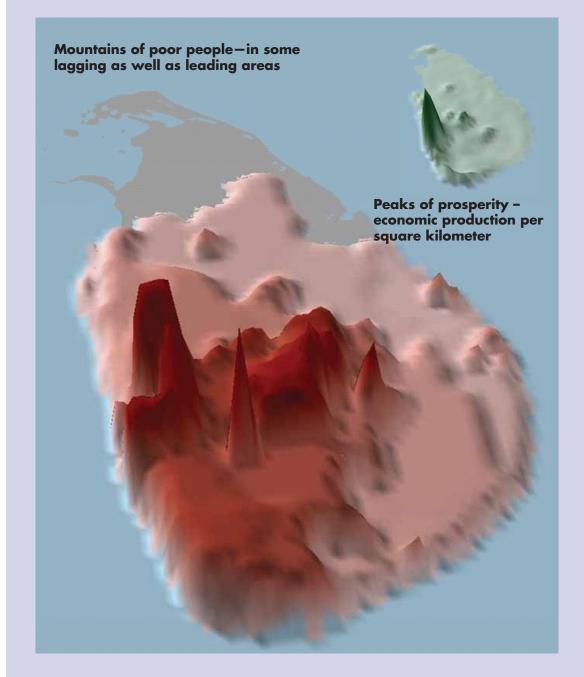
104. WDR 2009 uses poverty maps to calibrate policies to the severity of area-specific integration challenges. These maps can show which places are poor and which have most of the poor. Often, the two are not the same, because the poor have the most reason to move from poor places. Recall the map of where poor people live (figure 5, pg. xiv). It shows that the density of poor people in Sri Lanka is greatest in Western Province, not in lagging areas. While per capita income (consumption expenditures) was Rs. 6,935 in 2006, 471,000 poor people, or 17 percent of the nation's poor, lived in Western Province. The poverty map uses data from the 2006/7 HIES and shows that there were 121 poor people per square kilometer in Western Province—the highest density of poor people in the country. Figure 3.10 presents a three dimensional representation of the poverty map in figure 5, showing that there are mountains of poor people in the country's leading area. And the map on the top right corner of land. Clearly,

many poor people are connected to the "peaks of prosperity" in Western Province. But what about lagging areas?

- Uva, North Central, and North Western provinces have lower densities of poor people and a small share of the country's poor (figure 5, figure 3.10). For instance, North Central Province has 16 poor people per square kilometer (6 percent of the nation's poor), while Uva Province has 40 per square kilometer (12.3 percent of the nation's poor). In these areas, the integration challenge is primarily one of overcoming economic distance. Measures to enhance migration should be the mainstay of policies that connect people to prospering places. Economic distance between lagging and leading areas can be addressed mainly by improving spatially blind outcomes in education and health services. By investing in portable assets, policies can help people move toward opportunity.
- Central, Sabargamuwa, and Southern provinces have a larger share of the country's poor, but there are few impediments to their mobility. Indeed, Central Province is home to 100 poor people per square kilometer, and 20.4 percent of the nation's poor. The integration challenge in these provinces is overcoming economic distance and misplaced densities of poor people who are far from prosperity. Although migration will aid spatial efficiency and equity, this could take a long time because of the large numbers of the poor in lagging areas. In addition to mobility enhancing portable assets, infrastructure improvements are also needed to improve connectivity to leading areas. Infrastructure projects, such as the Colombo–Kandy Expressway and Southern Matara Highway, can reduce transport costs and increase interregional trade. Improving the movement of people and products will be needed to connect people with prospering places.
- Eastern and Northern provinces do not contain a large share of the country's poor, but domestic divisions have limited the movement of labor and exchange of products, resulting from conflict that has ended only in recent months. Improving health and education outcomes is critical, but this needs to be accompanied by institutions that improve the functioning of agrarian land markets and targeted interventions to help farmers develop market linkages. In this case, targeted policies are needed in the short to medium term to bring prosperity to people living in these areas.

105. Table 3.2 summarizes policy options for economic integration using a calibrated combination of institutions, infrastructure, and interventions.





Source: Poverty data: HIES 2006–07; GDP: World Bank Development Research Group's spatial analysis team based on sub-national GDP estimates

3.2.1 SUMMARIZING PRIORITIES

106. Delivering basic services everywhere is a priority because it accelerates economic progress and connects people in lagging areas with prospering places. By enabling people to seek economic opportunities and leveling the geography of basic living standards, these policies can become the sharpest instruments for unifying Sri Lanka. Past policies have done an impressive job in ensuring spatially equitable access to basic services, including education and health. In the future, the challenge will be to improve service quality in economically depressed areas. In education, rather than expanding schools in remote areas, it may be worth considering consolidation in places where enrollments are low and to use the resulting cost savings for much-needed teaching materials. There is no doubt that tertiary education is important for national transformation, but higher education subsidies disproportionately benefit rich families in Western Province. From the perspective of spatial efficiency and economic integration, it may be best to encourage private sector participation in the provision of tertiary education.

107. In health, coverage is fairly uniform across provinces, and by middle-income country standards Sri Lanka has an excess supply of hospital beds. However, services are underutilized in the network of hospitals run by provincial councils—people often bypass lower level facilities to seek care at nationally run hospitals. Health facilities in remote areas also find it difficult to attract high-quality doctors and nurses, partly because highly qualified personnel are drawn to Western Province with prospects of supplementary income from practicing in private clinics and hospitals.

108. In lagging areas with high densities, such as the Central, Sabargamuwa, and Southern provinces, there is considerable potential to augment common institutions with better transport links that help local economies benefit from economies of specialization and scale. The analysis reported here shows that transport improvements such as the Colombo–Kandy Expressway can reduce island-wide expenditures on transport by 20 percent. And this investment is a win-win for both economic efficiency and spatial equity, because it can generate higher cost savings in lagging areas–Uva, Eastern, and Northern provinces–compared with poor area-specific investments.

109. In lagging areas, such as Eastern and Northern provinces, where factor mobility has been restricted due to internal divisions, targeted interventions may be needed to stimulate geographic and economic transformations. But these incentives need to be preceded by institutional reforms that improve the fluidity of agrarian land markets, making land tradable between uses and users. And the design of interventions should be guided by information on local endowments and the understanding of what investors see as opportunities and constraints in converting endowments into profitable ventures. 110. By making efforts along these dimensions, policymakers can help in unifying Sri Lanka. What policymakers will notice is that while the geography of production will become further unbalanced, the geography of living standards will become flatter. This transformation will accelerate economic growth and enhance social harmony.

Table 3.2: An instrument per dimension – priorities for connecting people to prosperity						
	Sparsely populated lagging areas	Densely populated lagging areas	Sparsely populated lagging areas with domestic divisions			
Provinces	rovinces Uva, North Central, North Western		Eastern, Northern			
Dimensions of the integration challenge	Economic distance (1-D)	Economic distance High population densities in lagging areas (2-D)	Economic distance Internal divisions (2-D)			
What policies should Labor and capital Facilitate mobility		Labor and capital mobility Market integration for goods and services	Labor and capital mobility Selected economic activities in lagging areas			
	Policy p	priorities				
Spatially blind institutions	Improving health and education outcomes, safe water supply and sanitation	Improving health and education outcomes, safe water supply, and sanitation	Improving health and education outcomes, safe water supply, and sanitation Improving the efficiency of land use			
			and conversion			
Spatially connective infrastructure		Improving connectivity with the Colombo metropolitan area				
Spatially targeted Interventions			Incentives to agriculture and agro-based industry Amplify market linkages			
			Do not force activities out of the Colombo metropolitan area			
Source: Report team: Sri Lanka—connecting people to prosperity.						

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Annex 1: Spotlight on Eastern Province

The Mahinda Chintanya (MC) focuses on regeneration and revitalization of a ruralagrarian society, where subsistence agriculture will be induced to become more productive and commercially oriented, with greater value addition closer to production. The Negenahira Udanaya (Eastern Revival) is at the forefront of the development strategy to economically integrate Eastern Province with the rest of the country. The objectives of the program are to:

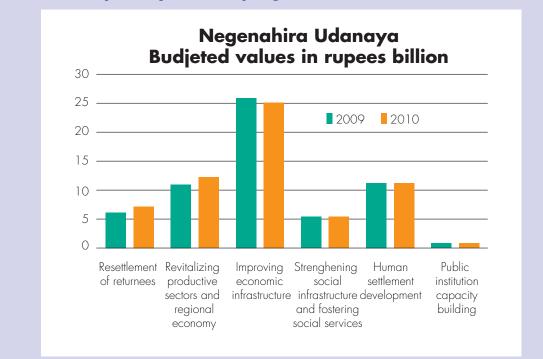
• Restore civil order and security for people and communities through resettling displaced persons, reconciling communities, and rebuilding social institutions.

• Restore livelihoods through reviving and expanding productive sectors and regional linkages.

• Improve economic infrastructure, strengthen social infrastructure, social services and human settlements, and improve internal and external connectivity of the region with the country.

• Develop Eastern Province as a hospitable and attractive place to live, visit, work, and conduct business. Create an environment where people can live in peace and

Figure A1: Negenahira Udanaya (Eastern Revival) investment plan by sectors/programs



Source: Ministry of Nation Building and Estate Infrastructure Development.

harmony and pursue livelihoods of their choice, in a way that will permit rapid social and economic development.

The government has drawn up a four-year plan starting in 2007 to move the program forward. Currently, implementation is under way, particularly investments in physical infrastructure, roads, bridges, ports, power plants, and waterways. The other areas are human resettlement, schools and vocational training, housing, water, and sanitation. The plan aims to restore economic vitality in agriculture and livestock production, fisheries, tourism, and small and medium enterprises. Budgeted expenditures are indicated in figure A1. The government expects to fund 29.5 percent of expenditures from state revenues and raise the remainder from foreign donors and other private sources.

What are potential economic drivers in Eastern Province?

Eastern Province has very fertile soil with superior agricultural productivity; it remains the main paddy producing region despite the setbacks from civil conflict and the tsunami. The province is also home to Trincomalee Harbor, with a reputation as one of the finest natural harbors in the world. The tourism potential is enhanced by many wildlife and nature reserves and national parks within the province or in contiguous territory. Eastern Province has the longest beaches (more than 400 kilometers) of any province in Sri Lanka, with many white sand stretches suitable for tourism and other recreational activities. It also has valuable mineral sand deposits, such as ilmenite and monazite. Eastern Province has numerous lagoons and bays in addition to its extensive coastal waters, which can and have been used for aquaculture, coastal, and marine fishing. Eastern Province has been one of the major fish producing regions of the country, though output has fallen drastically in recent years.

Endnotes

- 1 Colombo moved to 27th position in the Containerization International magazine ranking of World Ports in 2008 from 34th in 2006, with transshipment a significant share. Note that cargo volumes have contracted sharply as a result of the global economic crisis, but are now slowly recovering.
- 2 Annual census of industry, 2003: 2007 prices; 80 percent of industrial value added.
- 3 Sri Lanka estimates based on shipping price survey conducted by the World Bank in April 2009. U.S. estimates based on general published container shipping rates in the U.S., which typically quote a general "rule of thumb" of \$2.00 per mile, or about \$1.25 per kilometer.
- 4 The Price Monitor collects prices twice a week in Thirunelvely market in the Jaffna district, Kalmunai (Ampara district), Batticaloa town (Batticaloa district), and Vavuniya town (Vavuniya district). The monthly data is a simple average of the bi-weekly observations. The ten commodities shown are mostly commodities where Jaffna is a next "importer", and hence commodities were a relatively large downward price effect from integration could be expected. Indeed, certain product has in fact been cheaper in Jaffna than in the rest of the country during the periods of isolation, due to "over-supply" in the local market. Examples of such products are red onion, cabbage and carrots.
- 5 Annual Census of Industry 2003: at 2007 prices; 80 percent of industrial value being added.
- 6 Industrial Survey 2007/08.
- 7 CFSES 2003/04.
- 8 Marco Polo wrote of his visit in 1292: "I want you to understand that the island of Ceylon is, for its size, the finest island in the world, and from its streams come rubies, sapphires, topazes, amethyst and garnet." http://www.palagems.com/ceylon_sapphire_bancroft.htm
- 9 Census of Industry 2004.
- 10 Wijayasiri and Dissanayake 2008
- 11 World Bank 2008
- 12 Based on Industrial Survey of 2007–08 (Department of Census and Statistics).
- 13 See www.unicef.org/progressforchildren.
- 14 World Development Indicators 2009
- 15 The TIMSS is the most comprehensive international comparison on education. It includes 41 countries at five grade levels. Sri Lanka was not among the official countries participating in the TIMSS. NEREC administered the TIMMS test, which included 25 questions from the test in 1995 and 2003.
- 16 World Bank 2002
- 17 For details on the issues related to land sales market, see World Bank (2003).
- 18 Ravallion and van de Walle 2008
- 19 Shilpi 2009
- 20 for example, Foster and Rosenzweig 2004 for India; Deichmann, Shilpi, and Vakis 2009 for Bangladesh

- 21 Whalley and Zhang 2007
- 22 Iliffe (1995) on the historical impact of drought on population distribution in Africa; Bryceson (1999) on the Sahel and Sudan; and Hardoy and Satterthwaite (1989) on Mauritania. Wandschneider and Mishra (2003), cited in Deshingkar and Grimm (2004), on the drought-induced migration of 60,000 people out of Bolangir, in the Indian state of Orissa, in 2001.
- 23 Sahn and Stifel 2003; Anderson and Pomfret 2005; Venables and Kanbur 2005
- 24 De Silva and Perera 2007
- 25 The technical approach is inspired by Buchinsky (1994), Patrinos and Sakellariou (2004), and Nguyen and others (2007)
- 26 see Sen and others 2009 for details
- 27 Households have 25 potential districts to choose from in the conditional logit model. Households that stayed in the same district and did not move choose the same district as the origin in this model. The differences of well-water and electricity coverage are potential destination districts minus origin districts in 1981.
- 28 Hewings, Feser, and Poole 2007
- 29 Rephann and Isserman (1994). The evaluation of regional development programs was one of the first ever conducted in the United States using an experimental design.
- 30 Bayes 2007
- 31 Based on a shipping price survey conducted in Sri Lanka by the World Bank in April 2009. Exchange rates are for 2009.
- 32 Based on general published container shipping rates in the United States, which typically quote a general "rule of thumb" of \$2.00 per mile, or about \$1.25 per kilometer.
- 33 http://www.railway.gov.lk/future_plan.html, accessed February 8, 2010
- 34 The nodes are Anuradhapura, Badulla, Batticaloa, Dambulla, Galle, Hambantota, Jaffna, Kandy, Kurunegala, Nuwara Eliya, Puttalamand, Ratnapura, Trincomalee, and Vavuniya.
- 35 Vehicle operating costs measure the cost incurred by a vehicle traveling along a road per distance unit in terms of gasoline and vehicle wear and tear, calibrated to actual real dollars in advance by measuring local-country prices for vehicle repair and gasoline costs.
- 36 TransPlan road database.
- 37 Based on 2007 GDP and World Bank staff estimates based on Kumarage (2006).
- 38 In addition, labor costs are 20–25 percent of overall costs because state and port regulations warrant each truck to employ at least two people—a driver and cleaner due to security requirements— contributing to the high labor cost per trucking kilometer.
- 39 See WDR 2009 p.168.
- 40 School Census 2006 and MoE 2007.
- 41 OECD (get full reference).
- 42 School Census 2006.

- 43 Ministry of Health 2008 (http://www.health.gov.lk/Beds&Institute.htm).
- 44 NCED 2005.
- 45 The higher level hospitals are also equipped with the latest medical technology and have higher ratios of other medical personnel to doctors.
- 46 A few secondary level hospitals are, however, managed centrally by the MOHN
- 47 Some government facilities provide indigenous medical services. But the demand for such services has been declining since the 1950, in parallel with trends in neighboring countries such as Thailand and Malaysia.
- 48 Fernando and others. 2004.
- 49 Ministry of Health 2007.
- 50 Nawaratne and Ventura 2005.
- 51 Such models would include the World Bank Road Economic Decision (RED) model (see http:// www4.worldbank.org/afr/ssatp/Resources/HTML/Models/RED_3.2/red32_en.htm), the World Bank Highway Development and Management (HDM) model (see http://www.worldbank.org/ transport/roads/rd_tools/hdm4.htm), or the Economic Rate of Return (ERR) model used by the Millennium Challenge Corporation (MCC) (see http://www.mcc.gov/mcc/panda/activities/err/ err-investments/index.shtml), which has been used in MCC compact countries to evaluate potential infrastructure improvement alternatives. None of these models explicitly consider endogenous networkwide impacts in the assessment of potential investment impacts.
- 52 It should be noted that the analysis does not include lower-class roads (C-class and below, including rural roads). While such roads might show relatively low economic savings due to their low traffic volume and the informal nature of goods transport, rural roads can have significant social benefits by connecting households to public service, thereby increasing spatial equity.
- 53 Sri Lanka Selected Issues and Statistical Appendix, IMF country report 4/69 (2004).
- 54 These are approved investments. Information on realized investments is not available.



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