THE CONCEPT OF INSTITUTIONAL CAPACITY BUILDING AND REVIEW OF ROAD SECTOR PROJECTS

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ABSTRACT

This paper discusses the issue of institutional capacity building (ICB) within the road sector in developing countries and countries with transitional economies. It raises the question of what ICB is and how it should be understood. It further presents findings from a review of selected road sector projects in developing countries aiming at institutional reforms and capacity building.

The paper suggests that ICB should be appropriately defined to include both tangible factors (technical competence and organizational framework) and also an understanding of intangible factors (social arrangements). From the review of projects, it appears that ICB has not worked well because it has not been appropriately put on the agenda to include both tangible and intangible factors. Intangible factors are often ignored or underestimated.

The paper proposes that ICB should be seen as an instrument for creating good governance and integrity as it pursues the same objective - being the development of effective and efficient institutional arrangements so as to provide a reliable and safe road transport system.

This work has been carried out as part of the work of the PIARC Commission on Technological Exchanges and Development.

1. INTRODUCTION

In recent years, institutional capacity building (ICB) as means of improving road conditions and thereby help in alleviating poverty has preoccupied PIARC. The PIARC Technological Exchanges and Development Commission has the objective to promote the systematic identification, analysis and review of key issues for road development in developing countries and countries with economies in transition. ICB is one is these key issues.

The Commission's plan of action to promote ICB is to: (i) prepare an introductory position paper on ICB, (ii) in coordination with technical committees, develop seminars to discuss the topics addressed by the position paper, and (iii) incorporate specific ICB initiatives and concerns into future technical committees' work plans.

The Commission presented a position paper in 2005 [1] with the objectives to: (i) describe what ICB is and how it should be understood, (ii) describe some strategies for ICB that have been used in the past, (iii) survey previous aid projects on roads so as to identify the extent to which the goal of ICB has or has not been achieved, and (iv) draw some challenges that face ICB in the road sector. As a follow up to the position paper, a more in-depth review of some road sector projects in developing countries aiming at institutional reforms and capacity building has been carried out [2]. This paper includes discussions and findings of both the position paper and the review.

2. WHAT IS INSTITUTIONAL CAPACITY BUILDING?

Capacity building is currently one of the leading issues in the development of the road sector in developing countries and transition countries. Yet the concept of capacity building remains complex and difficult to grasp and put into practice.

2.1 The concept and definition of capacity building

The ICB position paper states that ICB encompasses three main activities: (i) skill upgrading, (ii) procedural improvements, and organizational strengthening. This is the most frequent definition found in World Bank documents. Thus, road sector related ICB refers to investment in people, institutions and practices that will enable developing countries and transition countries to achieve their road sector development objectives.

Defined in this way, ICB occurs by acquiring resources (human, financial, networks, knowledge, systems and culture) and integrating them in a way that leads to change in individual behaviour and ultimately to more efficient and effective operations of institutions and organizations.

However, ICB also has to do with two types of that are emphasized; *tangibles* and *non-tangibles.* The tangibles include physical assets such as infrastructure, machinery, natural resources, health of the population and education. Organizational structure and systems, legal frameworks and policies are also included in this category. The tangibles can be referred to as hard capabilities. These are factors that generally are amenable in either physical terms or in terms of indices.

The intangibles on the other hand, have to do with social skills, experience, creativity, social cohesion, social capital, values, motivation, habits, traditions, institutional culture etc., and hence can be referred to as soft capabilities. These are normally difficult to quantify. Others may term these capabilities as core capabilities as they refer to the creativity, resourcefulness and capacity to learn and adapt of individuals and social entities.

In ICB, the intangibles are as important as the tangibles because they determine how well a given society uses the other resources at its disposal. They are what allow them to realize their human and social potential to the highest possible level.

To achieve a proper and balanced ICB a balance is required between the tangibles and intangibles. This is illustrated in figure 1. What the figure illustrates is that, institutional development is more likely to succeed if it promotes both the tangibles (technical competencies and organizational framework) and intangibles (social arrangements).

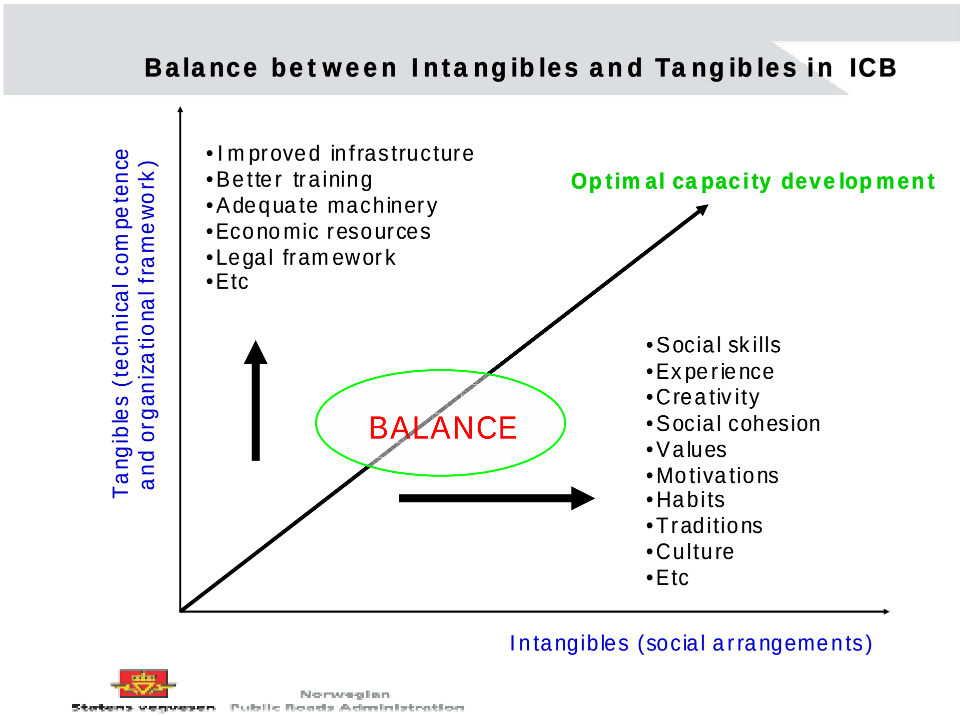

Figure 1 - Balance between intangibles and tangibles in ICB

2.2 The focus on capacity building in the past

Given the definitions above, there are reasons to believe that ICB within the road sector has had success problems primarily because only one of the axes and not both have been emphasized. This claim is verified by looking back at what has been the focus for capacity building in the road sector in the last three decades.

The 70s: The focus was on developing the individual through scholarships and on-the-job-training and on providing equipments. Serious failures have been witnessed in this approach as ICB is concerned. Many of those who received scholarship never returned, and those who returned got much better job opportunities quite different from their training giving better payments etc. In addition, the equipments provided were never maintained and eventually became more or less useless in the long run. Individual training alone never prospered capacity development.

The 80s: In the 80s, auditing came into focus because of the prevalent embezzlements. The donors were preoccupied with restructuring and redesign of the organizations to avoid embezzlements. Organizational audits and external supports were used to develop clear-cut financial supports for institutions. The idea was that money went to what they were intended for. Still, things never went well as far as ICB was concerned as the focus was one-sided, only the management of accredited funds.

The 90s: An increased understanding of the wider institutional framework emerged and the need to focus on outcomes. The World Bank for instance, introduced the concept of monitoring performance and that capacity building must be an important objective of development aid. The idea has been followed by many donor countries and development organizations. Yet, throughout the 90s, ICB was still a secondary objective of many aid projects with no clear-cut definitions and ways of achieving it.

2000 +: New global factors - such as globalization, the information revolution, the tremendous growth in international markets and the acceleration in the democratization and decentralization of national authorities - are causing international organizations such as the World Bank, UNDP and almost all other international development organizations to reassess their roles and competencies in offering development aid. Sustainable Human Development - a cross-sectoral strategy for poverty eradication, sustainable livelihoods, environmental regeneration and gender mainstreaming - is now being considered the best way of achieving long term sustainable development. It is now more and more recognized that achieving it requires processes based on partnerships with both government and civil society including the inter-relationships between individuals. These processes are being designed through facilitative and participatory approaches, and should be responsive and accountable to national priorities and objectives. These characteristics are not only the core principles of good governance in society; they also renew the main goals of development cooperation: long-term sustainability and an enabling environment that facilitates human development. One of its cores is ICB. Recent aid projects are concerned with how to facilitate ICB. The concept of ICB still remains difficult to grasp, and that is where we stand today and that is why the concept of the two axes defined above are important to pursue.

2.3 Capacity building in countries with economies in transition

The preceding discussion applies to both developing countries and countries with economies in transition alike. However, generalization about a process like capacity building can be dangerous. The institutional settings in transition countries are quite different from those of developing countries, and obviously the focus of ICB in these countries should be different.

Countries with transitional economies is a term used to describe countries that are in the process of moving from a centrally-planned economy towards free market principles. This term is used mostly for former eastern European countries but may include other Asian countries too. After the break of the Soviet Union, most of the eastern European countries faced deep economic distortions, major trade disruptions and absence of market-oriented institutions.

ICB for the European transitional economies should be seen in the light of the requirements for joining the European Union according to which a prospective member must: be a stable democracy, respecting human rights, the rule of law, and the protection of minorities; have a functioning market economy; and adopt common rules, standards and policies that make up the body of EU law.

ICB in these countries is a question of democratization and commercialization to fit the developing market-oriented economies, and the EU accession process has played a catalytic role in accelerating institutional and policy reforms [3]. In the road sector, this process translates into: making the road administration a commercially operated management organization; developing modern road financing systems;

developing capacity within management, procurement and financial issues including contract management; developing managerial and financial skills of the domestic contracting industry; improving governance to ensure effective management; developing payment discipline, transparent regulations, enterprise reforms etc.; and increasing public participation.

Privatization should, however, not be seen as a panacea. Private provision of infrastructure needs public control. Government bodies which are unable to efficiently deliver public services are also unable to efficiently control private enterprises contracted to do it. There are examples of transition countries facing difficulties because they have jumped too fast towards privatization without going through the right sequence of reform.

2.4 Capacity building – a tool to promote good governance and integrity

Governance can be defined as a set of traditions and institutions through which authority is exercised with the objective of achieving common good. Good governance and integrity is characterized by transparency, accountability, predictability and credibility.

The issue of good governance and integrity is on the agenda of most government organizations today. For road administrations, this is a about developing effective and efficient institutions with the ultimate objective to provide a reliable and sate road transport system.

From the preceding discussion, the relationship between good governance and ICB should be obvious. The ICB concept pursues the same objective, and should thus be seen as a way of promoting and developing good governance and integrity.

3. STRATEGIES FOR CAPACITY BUILDING

In the following some ICB strategies that have been used in the past in developing countries are discussed in the light of the definition of ICB with the two axes.

3.1 Financial assistance and supply of physical resources

In this strategy, simple lack of resources, either financial or physical assets, are seen as the major lack of institutional capacity. This strategy is prevalent among many aid agencies throughout the world. The rationale of this strategy is that the concerned institution lacks adequate supplies or finances to achieve its efficiency. The strategy for the donors is then to provide more equipment, more funds for operating costs, salary payments, more buildings, trained staff etc. so as to improve the conditions for capacity development.

This strategy has in the past dominated development aid. It has the advantage that, for donors it is relatively easy to implement and, furthermore does not intrude much into the affairs of participants. In several circumstances, the provision of funds, training and machinery has helped institutions develop and in particular get through critical periods. However, this strategy may not function well. There is the risk that the resources supplied may be appropriated by officials of the institutions for their own personal benefits. In other circumstances, the supply of resources may make the institutions donor-dependent also in the long run. The supply of resources becomes pay-offs rather than incentives and does not lead to a sustained development of the institutions. Returning to the illustration in figure 1, this strategy definitely improves only one of the axes; the tangibles, and therefore will not promote ICB appropriately.

3.2 Improving the organizational and technical capabilities of institutions

This strategy has the aim of improving the personal, technical and organizational capabilities of the institutions so that they better perform what is already being attempted. It is thus a variant or a subset of the strategy above with the difference that it is motivated by lack of technical capabilities and proper institutional structure rather than resources. In the road sector in particular, this strategy has become common, and it is the one mostly considered as capacity building approach. Activities included are such as: (i) technical assistance in terms of personnel, (ii) technical training of local personnel either locally or in form of scholarships abroad, (iii) improvement of management and financial systems, and (iv) improved working conditions.

This strategy has definitely improved technical capabilities of many institutions, at least in the short term. The value of training and skill improvement are undoubtedly important for capacity development and should be encouraged. It also remains true that many developing countries suffer from poorly performing organizations and lack of trained staff and proper management systems.

However, this strategy may also be inefficient in promoting institutional development. Many institutions are under constraints far beyond what can be termed tangibles and what technical support is not about. Such constraints may include politics, motivation, culture etc., which may prevent institutions and individuals from performing regardless of their technical skill levels. The current situation, after so many years of emphasis on education and training as a means of developing capacity, reveals that skills and training has become less of a constraint in many countries than what was the case 15-20 years ago. What should matter now is the utilization and retention of the already available capacities. That can only be achieved if the intangibles discussed above are considered seriously. Again, it is the mix of the two axes in figure 1 that can lead to optimal capacity development.

3.3 Setting strategic goals for an institution

This strategy is on march. The problem is that institutions do not have clear directions or cannot define a consistent direction. Take the case of a road traffic directorate. Should the capacity building be traffic safety, increased supply of roads, environmental improvement in cities, economic development or all? And further, pressure from the different groups may be enormous, each wishing to achieve their own goals. Or, there may be no consensus in the political system about the purpose of the institution.

The aim of the strategy is to help induce a policy or a general direction that can guide actions and the development of capacity in the long term. The advantage with this strategy is that it is simple. Ideas developed can be compared to experiences elsewhere. The problem, however, is whether the intangibles really are taken into account in an appropriate way. Otherwise it will most likely result into a failure.

3.4 Strengthening the larger system, networks and organizational framework

This strategy aims to help a group of institutions to work together to carry complex tasks such as national budgeting, national health plans and national transport plans. The system lacks the organization or its sub-units to perform these functions. Or the interrelationship between actors in the sector/system needs reshaping to perform their functions. For this strategy to work well, focus must be both on the interrelations between the organizations and individuals and groups of individuals. Again, the two axes explained above are important. Perhaps this strategy is the most complex one for development organizations to accomplish.

4. HOW HAVE CAPACITY BUILDING PROJECTS WORKED IN THE PAST?

For the last two decades, capacity building has been seen as an integral part of development aid by almost all countries and development organizations. With the aim to examine how capacity building projects have worked, a review of such projects in some developing countries world-wide has been undertaken. The review has been carried out as a literature study using project evaluation reports as data source.

4.1 The scope and objectives of the review

The review comprises five cases from different developing countries.

1. Institutional sustainability and capacity development within SIDA financed road safety projects (Swedish International Development Cooperation Agency) [4]
2. Norwegian assistance to the road sector in Botswana (Norwegian Agency for Development Cooperation) [5] [6]
3. Norwegian assistance to the road sector in Tanzania (Norwegian Agency for Development Cooperation) [7]
4. Assistance to the transport sector in Ghana (African Development Bank) [8]
5. Road sector management in Lao PDR, Papua New Guinea and Philippines (Asian Development Bank) [9]

The objectives of the review have been to find out:

- how ICB is perceived
- how ICB is addressed
- to what extent the cases relate to the ICB concept as set out in the position paper
- which experiences have been gained (successes and failures/short-comings)

In the assessment of the projects’ performance and results, the World Bank rating system is used. The following factors are considered:

Outcome - consists of the following three factors: (Possible ratings: high, substantial, modest, negligible)

Relevance - the project's objectives in relation to country needs and institutional priorities.

Efficacy - the extent to which the development objectives have been achieved.

Efficiency - the extent to which its objectives have been achieved without using more resources than necessary.

Sustainability - the likelihood that the estimated net benefits will be maintained or exceeded over the life of the project. (Possible ratings: highly likely, likely, unlikely, highly unlikely, not evaluable)

Institutional development impact - the extent to which the project improves the ability of a country to make better use of its resources (Possible ratings: high, substantial, modest, negligible)

4.2 Findings of the review

A summary of the review findings are presented below and structured according to the four objectives set for the review.

4.2.1 *How is ICB perceived?*

The term capacity building is perceived or understood in different ways. In some cases it refers to activities aimed at developing structures, organizational mechanisms and processes, and human resources. In other cases, the terms capacity building and institution building are used in the sense of training and technology transfer.

4.2.2 *How is ICB addressed?*

In the road safety projects (case 1), various approaches to ICB have been used. It appears however, that only a few projects have had institutional capacity development as the main objective.

In Botswana (case 2), capacity/institution building has been addressed through the provision of expatriate staff, training, and development of technology, work methods and procedures. As a means of capacity/institution building, institutional cooperation (twinning arrangement) is set up.

In Tanzania (case 3), capacity building is provided for through institutional cooperation (twinning arrangement) involving advisors on short-term assignments.

In Ghana (case 4) and in the South-East Asian countries (case 5), capacity building is limited to consulting services and training on managerial and technical matters.

4.2.3 *To what extent do the cases relate to the ICB concept as set out in the position paper?*

It appears that interventions and activities in general have been geared towards hard capabilities (tangibles). Little attention has been paid to soft capabilities (intangibles) although local conditions have to some extent been taken into account in the design and implementation of the various activities.

4.2.4 *Experiences in the field of road safety (case 1)*

Sweden has supported road safety projects in developing countries with a focus on capacity development of key institutions.

The projects have not had an optimal impact which is partly due to the lack of an overall strategy for institutional capacity development. The lack of an overall strategy has resulted in spreading of limited funds thinly into too many components and activities and in allocation of resources to the design of activities rather than to the implementation stage.

Another lesson learned is that interventions need to be adapted to the recipient's level of development and absorption capacity. Further, expertise within institutional capacity building and reform processes is needed both at the sector-level and the macro-level.

For results to be sustained, the following factors are found to be critical: political support; institutional mechanisms to secure and allocate resources; functioning bodies for communication between and coordination of stakeholder contribution; and individuals with the necessary knowledge and experiences.

Table 1 – Summary of project performance: Institutional sustainability and capacity development within SIDA financed road safety projects

Criteria	**Road safety projects**
Relevance	High
Efficacy	Substantial
Efficiency	Modest
Sustainability	Unlikely
Institutional development impact	Modest

4.2.5 *Experiences in Botswana (case 2)*

Botswana and Norway have had a development cooperation program in the road sector since the early 70s.

The factors which are identified as being important to the success of this cooperation program are: demand-driven development assistance; careful start of the development assistance adapted to the local situation; development of appropriate technology and work methods; focus on technology transfer and human resource development; and the long-term cooperation (30 years).

The low salary levels within the public sector represent, however, a major problem. There are problems recruiting and retaining local engineers. The force account regime has been replaced by contract works, and a concern of the Botswana Roads Department today is how to maintain the in-house technical know-how of road works and become a professional client.

Table 2 - Summary project performance:
Norwegian assistance to the road sector in Botswana

Project / Criteria	Administration and governance	Rural roads construction and maintenance	Roads Training Centre	Material development	Labour-based technology
Relevance	High	High	High	High	High
Efficacy	Modest	Substantial	Substantial	Substantial	Substantial
Efficiency	Modest	Substantial	Substantial	Substantial	Modest
Sustainability	Likely	Likely	Likely	Likely	Likely
Institutional development impact	Substantial/ Modest	Substantial/ Modest	Substantial/ Modest	Substantial/ modest	Substantial/ modest

4.2.6 *Experiences in Tanzania (case 3)*

The World Bank initiated road sector institutional reforms in some Sub-Saharan African countries around 1990, among others in Tanzania. The reform program components are:

- Management – establishment of a autonomous road agency
- Financing – establishment of a road fund to support operation and maintenance of roads which is administered by a road fund board
- Responsibility – a consistent organizational structure for managing the road networks where the Ministry is the client, the road fund board the purchaser and the road agency the service deliverer
- Ownership – user involvement in the management of the road fund

The Norwegian assistance to the reform process in Tanzania has been useful in building up the capacity of the Ministry of Works and of the new road agency TanRoads. The Ministry of Works needs to redefine and implement its new role as a policy maker, regulator and strategic planner. TanRoads is now able to recruit staff on a competitive basis, to secure and manage road funding, and to monitor use of funds. The process of reform has, however, taken much longer than foreseen.

The experiences in Tanzania with this reform program show that the new institutional setting has created a need for professional staff with financial and managerial skills to help develop the new institutions. The reform process has to some extent underestimated the need for human resources development to go along with the new institutional settings.

Table 3 - Summary of project performance:
Norwegian assistance to the road sector in Tanzania

Criteria	Road Sector Program
Relevance	High
Efficacy	Substantial
Efficiency	Substantial
Sustainability	Likely
Institutional development impact	Substantial

4.2.7 *Experiences in Ghana (case 4)*

In Ghana, previous efforts to restructure the Ministry in different forms did not produce any significant improvement in institutional arrangements. The African Development Bank's financing included some capacity building components of a short-term nature to facilitate project implementation. The impact of such assistance was limited in scope and not sustained and needs to be strengthened. However, Bank financed studies and projects have assisted in transfer of skills from consultants and contractors engaged during implementation.

The Government has made progress in recent years to put appropriate structure and funding for maintenance of the road network. In order to sustain the road infrastructure, the road fund was restructured in 1997 to have its own Board and managing director. The fund is dedicated to the preservation of Ghana's trunk, feeder and urban road networks.

Table 4 - Summary of project performance:
Assistance to the transport sector in Ghana

Criteria	Ghana transport sector
Relevance	Substantial
Efficacy	Modest
Efficiency	Modest
Sustainability	Likely
Institutional development impact	Modest

4.2.8 *Experiences in South-East Asian countries (case 5)*

The support by the Asian Development Bank to the three countries Lao PDR, Papua New Guinea and Philippines have had the common purpose to strengthen the road sector management in the respective countries.

A lesson learned is that a long-term involvement with the stakeholders, with support and follow-up over a period of five years or more is required to maintain momentum and stakeholders' interest.

The project interventions have been hampered by bureaucratic structures, corruption and misappropriations. Other factors having negatively affected the project are lack of credit facilities for equipment and materials, inadequate funding for the road sector, and low salaries.

Table 5 - Summary of project performance:
Road sector management in Lao PDR, Papua New Guinea and Philippines

Project / Criteria	LAO	PHI	PNG1	PNG2
Relevance	Substantial	High	High	High
Efficacy	Substantial	Substantial	Substantial	Substantial
Efficiency	Substantial	Substantial	Substantial	Modest
Sustainability	Likely	Likely	Unlikely	Unlikely
Institutional development impact	Substantial	Modest	Modest	Modest

4.3 Some common lessons learned

This review reveals that the term capacity building is perceived in different ways, and in most cases, it addresses technical competence and organizational issues while the social and cultural setting is often ignored or underestimated.

From the case studies, it is possible to identify some key factors leading to success in achieving capacity development objectives. These factors seem to be: long-term involvement; demand-driven assistance; interventions adapted to the level of development and absorption capacity of the institutions involved; and focus on human resources development.

Looking at the scores on institutional development impact, the results are not impressive as long as the projects have capacity building as a main objective. The scores vary from modest to substantial. Some factors seem clearly to cause short-comings or failures of interventions unless they are taken into account. An important factor in this respect is the need for a proper understanding/competence of institutional reform processes and capacity building. Further, human resources development is needed to help develop new institutional arrangements, and this aspect is often underestimated.

Low salary levels of the public sector also seem to cause problems in achieving results. These are far from competitive with salary levels of the private sector, and apart from facing problems with recruiting and retaining qualified staff, low salary levels make government organizations prone to corruption and misappropriations.

The review findings do indicate that institutional reform processes and capacity building need to comprise technical competence and organizational frameworks (tangibles) and an understanding of the social and cultural arrangements (intangibles). This requires expertise in reform processes both at the sector-level and the macro-level.

This review also shows that the time required for institutional reform processes to yield results should not be underestimated. Complex bureaucratic structures and decision-making processes easily hamper reform processes.

Lastly, the sustainability of institutional reform processes appears to strongly depend upon political commitment, stakeholders' ownership of the objectives and processes, and mechanisms to secure and allocate human and financial resources.

5. CONCLUDING REMARKS

This work on ICB in the road sector reveals that there is no clear definition and understanding of ICB among the various actors involved in road sector development, and efforts to achieve it are equally unclear.

A definition of ICB is suggested which takes into account both tangible factors (technical competence and organizational framework) and intangible factors (social arrangements). This definition is supported by the findings of the review of capacity building projects.

As this paper states, there is a close relationship between ICB and good governance. However, if ICB is to serve as a useful instrument to create good governance, countries and development organizations need to put much stronger emphasis on intangible factors in their future development efforts.

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