THE CAMBODIAN SOLUTION TO CHINESE ETHNIC BILINGUAL EDUCATION PROGRAM

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ABSTRACT
Chinese ethnic bilingual education program is a mean to leverage ethnic minorities to more social upward opportunities in the Mandarin (Han language)-dominated society. After investigating contemporary papers about the remaining issues, the present article qualifies the existing inequality of ethnic bilingual education rooted from the irrationality of government’s policy, the weakness of policy implementation, and the contradicted culture environment for ethnic bilingual education. Shared a similar ethnic population structure, the Cambodian’s Highland Children’s Education Project (HCEP) provided inspirations to Chinese ethnic bilingual education in the utilization of NGOs power, the setting of community school board, the design of teacher training program and curriculum system. Deliberatively considered Chinese political environment and government funding availability, this article suggests that selected Chinese local government can partnership with domestic NGOs to run experimental school based on HCEP model and the practical insights for future ethnic bilingual innovative programs in Chinese rural ethnic area.

Key Words: Ethnic bilingual education; Education inequality; Educational policy, Comparative Education.

1. INTRODUCTION
The ease of transportation empowered by innovative technologies has contributed to people’s continuous internal migration or immigration; the blooming diversity within a country creates the need for bilingual education. The definition of bilingual education is using two different languages as the medium of instruction, always involving a minority language (or subsidiary language) and a majority language (or national language) [1]. The anterior one refers to a language that often used by a regional group, the latter always being the officially recognized language. China is a dictatorial country with 56 ethnic groups. According to the Almanac of Chinese Education Data 1949-1981 [2], the Han group attribute 94% of the total population and occupied about 40% of China’s territory, including most of the eastern coast and the fertile land of the Yangtze and Yellow Rivers. In contrast, the other 55 ethnic minorities accounted for only 6% of China’s total population and concentrated in economically underdeveloped western high mountains and plateau areas, including many rural and remote regions.

Interestingly, despite the geographical, cultural, and linguistic difference, all ethnic groups in China share a particular identity, “Zhong Hua Ethnic.” The development of ethnic bilingual education for Chinese ethnic minorities has helped to produce this unified identity and has also helped ethnic minorities to better integrate into a society dominated by the Han ethnic group [3]. However, the decaying quality of Chinese ethnic bilingual education led to questioning equality between ethnic minorities and the general application of the policy [4, 5]. The current bilingual education model is having difficulty finding a balance between the original intention - strategical
assimilation of ethnic minority groups- and the ideal result - diversity reservation. The advantage of bilingual education in Cambodia, named the Highland Children's Education Project (HCEP), is that it is very community-based, scientifically designed, and shows excellent inclusiveness of disadvantaged groups. Unfortunately, there is a vast research gap in comparative education between China and Cambodia.

This paper provides a perspective on policy formulation, implementation, and enforcement environment to detect existing problems and to look for the possibility of better policies from Cambodian success stories.

1.1 Policy Formation: the Start of Inequality

The embarrassing state of Chinese ethnic bilingual education could be traced back to the suppression of ethnic language along twists and turns of the policy development path. Although the Communist Party of China (CPC) first emphasized the autonomy of ethnic education for minority group [6] and the Ministry of Education clearly stated that the fight of ethnic minorities to receive education in their language should be guaranteed. Bilingual education for ethnic minorities was defined as a necessity to maintain stability and unity in ethnic minority areas [7]. However, the political turmoil from the Great Leap (1958-1960) and the Culture Revolution (1965-1976) has stalled and even regressed the development of bilingual education as the political climate started to devalue ethnic language after Enlai Zhou introduced the Hanyu Pinyin (the phonetic spelling system of Mandarin) nationally in 1958 [8]. Believing in "direct transition," many schools only offered courses entirely in Mandarin and used national unified teaching materials. The Mandarin-only classroom left a fissure in teaching ethnic minority languages; Many people could not understand the textbook in minority languages after Xiaoping Deng came to power in 1978 and resumed teaching the ethnic minority language [9].

The two modes of Chinese ethnic bilingual education program, Type I and Type II, require ethnic bilingual teachers to know both Mandarin and the ethnic languages adequately; the only difference might be the native tongue of Type I and Type II teachers, such as ethnic minority language or Mandarin. The Type I bilingual education model involves using ethnic minority languages as the primary language of instruction with an additional course in the mainstream language, in this case, Mandarin. The Type II program, in contrast, use the dominant language (Mandarin) as the primary teaching language and simultaneously provides a supplementary ethnic minority language course [10]. Even though ethnic minority language teaching was still acknowledged as a necessity, the opinion that ethnic minority language is a "crutch" to learning Chinese started to appear [11]. Mandarin was strongly emphasized as the medium of teaching language, especially after the compulsory education act was introduced in 2000, inducing many downturns in ethnic minority language education. The ethnic minority language exam was excluded from the Secondary School Entrance Examination (SSEE) because of the compulsory education act, which strongly reduced the motivation of ethnic minority youth to learn minority languages and the overall need for ethnic minority teachers. The school curriculum is set up as nationally unified subjects such as Chinese (Mandarin), mathematics, science, sports, music, art, ideology, and morality (politics), and the assessment methods are also unified across the country [12].

More than that, Lin (1997) observed the strong motivation for minority youth to choose Mandarin over minority languages because Mandarin could be "the avenue to opportunities and social acceptance, whilst minority languages are limited in use and of low social status [13]." This
kind of atmosphere even started to exaggerate in local government departments; the chair position of the department that charge of ethnic bilingual education was vacant for more than ten years [11]. Mandarin was regarded as more important than ethnic minority languages, creating an indolent atmosphere in learning ethnic minority languages.

1.2 Policy Implementation: the Powerless Local Government

The local government held the most responsibilities for restoring and maintaining the traditional culture of ethnic minorities and helping them integrate into the modern mainstream society through bilingual education [14], whereas the implementation of bilingual education projects by the local government is subject to many practical constraints like the unfair distribution of educational resources between urban and rural areas.

Taken the data from 2020 China Census report “Population aged three and over by gender and educational attainment by ethnicity” as an example, the educational inequality can be identified in the proportional distribution of different educational achievement levels in ethnic groups, which is the ethnic population that reach to an educational achievement level divided by the total ethnic population over age 3. The equation to calculate such proportional is shown below:

\[
Educational\ Achievement\ Proportion = \frac{Educational\ Achievement\ Level\ (EP)}{Total\ (EP)}
\]

The 14 ethnic groups with the largest population in 2020 are included in the comparison, and the results are shown in figure 1.

![Educational Achievement Proportion in 14 Different Chinese Ethnic Groups of Age 3 and Above (2020)](image)

**Figure 1:** Educational Achievement Proportion in 14 Different Chinese Ethnic Groups of Age 3 and Above (2020)

Original Figure
The figure confirms the educational inequality between different ethnic groups. For example, using high school education achievement level as the indicator of "getting a high education," only the proportion of the Mongolian ethnic group and Manchus ethnic group who "receive a high school education or above" reaches the national benchmark level. On the other hand, the Tibetan (Zang), Yi, and Miao ethnic groups have the highest proportion of the population with junior high school education or below, indicating that the overall education level of these three ethnic groups is relatively low. Even more worrying is that the proportion of Tibetans who "never went to school" is the highest among the 14 ethnic groups, indicating that Tibetans have more significant obstacles to school enrollment than other ethnic groups.

However, the figure also overturns the opposing identities of the Han and other ethnic minorities in the distribution of educational resources, implying other important factors contribute to educational inequality other than ethnic identities. The tremendous inequality resides in the national policy and resource preference for the Eastern economic developed regions. As a result, the Western ethnic areas are at a disadvantage in terms of financial support and cultural investments [15]. The rural local governments' financial hardship could generate many obstacles for governments to implement ethnic bilingual education programs as a chain reaction.

1.3 Outdated School Facilities

Without the government’s profound financial support, ethnic minority schools do not have much chance to upgrade school facilities [15] or build more schools [16]. For example, the rural primary schools of the Hui people in Ningxia only provide content for grades one through four. Moreover, the complete primary schools are in towns far from students’ homes without accommodation for dorms. Consequently, many children drop out of school after completing the first four grades in primary school. The outdated school facilities are also a concern and only fulfilling the most basic function. For those Hui students, the blackboard could be a random plank brushed with cement. Compared with classrooms equipped with advanced technologies such as computers and projectors in big cities, most primary classrooms in rural areas cannot provide a good teaching environment. As a result, students lack opportunities to learn computer technology and master more effective information collection and analysis capabilities. The phenomenon in Ningxia echoes Hong’s (2010) research finding that urban-rural differences and class inequality mainly cause ethnic differences in primary education enrollment and promotion rates [17].

1.4 Shortage of Qualified Bilingual Teacher

Another major problem many local governments face is the deficient number of qualified ethnic bilingual teachers. Local universities sometimes have limited power in cultivating ethnic bilingual teachers. A survey on bilingual education teacher training in Yunnan shows that among the eight Yunnan border ethnic groups, only two of them ((Xishuangbanna and Dehong) have set up ethnic language teaching programs in local colleges and universities [18]. The teacher shortage means a lack of human resources to bear the administrative work in bilingual schools. The existing teachers are distributed with overwhelming work [19], increasing the imbalance between income and effort that risk for attrition.

The central government sometimes assign teachers to rural areas through "support education." For example, the Tibetan Autonomous Region send 300-500 teachers to the Southern Qinghai Bilingual School each year [20]. These teachers are promised salary, performance incentives, housing, and preferential policies for professional title evaluation and promotion. However, most...
minority bilingual schools in poor rural areas are far away from the cities. In addition to different language and cultural environments, those supporting teachers must also overcome harsh environments and difficult living conditions (e.g., plateau areas). Either way, the stretched government financial level may not be able to provide enough subsidies and benefits for ethnic bilingual teachers to balance the teachers' "extra difficult work in teaching [11]," resulting in the leave of teachers. The high teacher attrition rate has led to unstable teacher resources in rural schools.

1.5 Dearth of Textbooks

Unaccompanied by the government’s profound financial subsidies, it is difficult to provide enough textbooks and language reference books for diverse ethnic languages. Besides the work from the local compilation/translation room, textbooks could also be published by publishers. Because the ethnic language is more complex than the Han language, the textbook translated from Mandarin has more pages, resulting in a higher printing cost. However, the small ethnic minority population only has such low demand for textbooks, which naturally leads to textbook production diminishment [13]. Furthermore, the compulsory education act in 2000 redefined the national curriculum and school years; five-year primary school was extended to six-year primary school, creating a poverty of ethnic minority textbooks and incompatible course designs [12]. The dearth of ethnic minority language textbooks is unfortunately becoming a substantial impediment to ethnic teacher training; It is tough to cultivate good ethnic bilingual teachers without fertile soil of mature teacher training materials and textbooks. Moreover, in the in-depth study of minority cultures and languages, it may be impossible to accurately understand the true meaning behind a text without proper reference material.

1.6 Trouble in Policy Enforcement: Regional Cultural Pushbacks

A significant factor affecting the implementation of bilingual education for ethnic minorities is the religious and cultural traditions of different ethnic groups. For instance, Dai families who devoutly believe in Buddhism often send six to ten years old children to temple education instead of school education [21]. Islamic parents (such as the Hui people) prefer to educate their children about religion and culture through strict religious etiquette and rules instead of school education. The parents from Christian family believe that character education is essential in school and that knowing and trusting God is more important than grades [22]. Given the fact that studies are showing that the critical period for second language development is before puberty [23], those who miss bilingual education in childhood are also very likely to miss the critical period of second language development.

Cultural conventions like early marriage could also be a resistance to ethnic bilingual education. Taking the Miao people in Guizhou as an example, early marriage is prevalent due to the weak legal supervision and the economic benefits of the betrothal gift [24]. The beginning of marriage means the interruption of education - 79% of people who identified with early marriage did not complete the nine-year compulsory education. The conventional belief that "girls do not need good education but to find a good husband" can hinder family support for girls' education. Many rural families do not support their female children to get higher education because girls will eventually become an outsider in the family when getting married [16]. Different religious and cultural ideologies brought more reluctance for rural ethnic families to give sufficient attention and substantial support to students' bilingual education.
2. THE COMPARISON BETWEEN CHINA AND CAMBODIA

Admittedly, this article discusses the imperfections that remain in Chinese ethnic bilingual education programs, but the achievements of China's education popularization have attracted worldwide attention.

Table 1. Adult literacy rate aged 15+ years by age group, sex and area, Cambodia (2019) and China (2020) comparison

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Cambodia (2019)</th>
<th>China (2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Both Sexes</td>
<td>Male</td>
</tr>
<tr>
<td>Total</td>
<td>15+</td>
<td>87.7</td>
</tr>
<tr>
<td></td>
<td>15 - 19</td>
<td>95.9</td>
</tr>
<tr>
<td></td>
<td>20 - 24</td>
<td>93.4</td>
</tr>
<tr>
<td></td>
<td>25 - 59</td>
<td>87.5</td>
</tr>
<tr>
<td></td>
<td>60 +</td>
<td>75.2</td>
</tr>
<tr>
<td>Urban*</td>
<td>15+</td>
<td>93.3</td>
</tr>
<tr>
<td></td>
<td>15 - 19</td>
<td>97.6</td>
</tr>
<tr>
<td></td>
<td>20 - 24</td>
<td>96.7</td>
</tr>
<tr>
<td></td>
<td>25 - 59</td>
<td>93.6</td>
</tr>
<tr>
<td></td>
<td>60 +</td>
<td>82.6</td>
</tr>
<tr>
<td>Rural</td>
<td>15+</td>
<td>83.8</td>
</tr>
<tr>
<td></td>
<td>15 - 19</td>
<td>94.8</td>
</tr>
<tr>
<td></td>
<td>20 - 24</td>
<td>90.6</td>
</tr>
<tr>
<td></td>
<td>25 - 59</td>
<td>83.0</td>
</tr>
<tr>
<td></td>
<td>60 +</td>
<td>71.0</td>
</tr>
</tbody>
</table>

* The Chinese urban data includes two administration level: city and county

Source:


In the 2020 data of Census, China Education is proud to show that the literacy rate of people over the age of 15 has exceeded 95% (Shown in Table 1). Although Cambodian education cannot be compared positively with China regarding the achievement of education popularization, it is...
found through data that Cambodian education is more inclusive than Chinese education, especially among the education of rural women. The literacy rate of rural women aged 25-59 in Cambodia has reached 79.6%, while the literacy rate of women in the same age group in China is only 24.1%. The finding is also factual for rural women over the age of 60. The literacy rate of Cambodian rural women over 60 is about 63.1%, nearly 40% higher than that of Chinese women of the same age. The finding indicates that the Cambodian education model may have paid great attention to vulnerable groups.

Like China, Cambodia is a multi-ethnic country with Khmer ethnic as the mainstream group. Cambodia's indigenous ethnic minority groups were sometimes referred to as "highlanders" since they were predominately located remotely in the north or northeast regions, just like many Chinese ethnic minority groups in need. The number of ethnic minority populations was hard to track over historical time since the continuous change of the government authorities and lack of population studies. However, it was estimated by the Department of Ethnic Minority in 1992 that there were 36 ethnic minority groups with a population of 309,245, which made up 3.5% of the total population of Cambodia [25]. Although the number of indigenous populations varies from different institutions, the approximate number of indigenous people population is 115,000, which is almost 1.5% of Cambodia's total population [26, 27].

Unlike China, Cambodia does not have a unified national identity, but Khmer is still Cambodia's most critical and circulative language. Historically, indigenous ethnic minority children were excluded from accessing school resources due to their remote location [28]. The integration of ethnic minority groups into Khmer started in 1959 when Khmer culture was introduced to indigenous people aiming to create more labor force in low-land rice fields [29] till the Cambodian education system almost perished from the Vietnam war and civil strife from 1975 to 1979. The education system gradually returned to life by hiring teachers who "know little more" to teach students who "know less." After the Paris Peace Accord in 1991 and the United Nations coalition, Cambodia started receiving aid from different international organizations to upgrade the school system. In 2000, the Cambodian government participated in the World Education Forum hosted by UNESCO, determined the Education for All policy direction (EFA), and formulated the national plan for Education for All 2003 – 2015 [28]. However, the geographical environment in which the highland ethnic minorities live is difficult to access enough educational resources due to cultural and linguistic segregation. The HCEP project is created to respond to this need. In the following sections, the developmental path of HCEP will unfold the secrets of its success.

3. THE SECRETS BEHIND THE HCEP
3.1 Textbook Preparation

When confronted with the educational needs of these highland minorities, an important issue required to be addressed: teachers do not understand the minority language, and minority children do not speak Khmer [28]. Therefore, the development of bilingual education was imminent. In order to enable the standard implementation of bilingual education, two NGOs have played a vital role in promoting the development of bilingual education in Cambodia. International Cooperation Cambodia (ICC) started with preparing teaching materials. The first challenge was getting the government to accept that ethnic minorities use textbooks written or annotated in the local language when they were used in bilingual education. Fearing regime instability, the Cambodian government initially rejected the ICC's request to use the local language in its textbooks. Fortunately, the ICC finally cooperated with the Cambodian government and MoEYS, and in 2003...
Cambodian government officially approved the development and application of the Tampuen, Kreung, Kavet, Brao, and Bunong languages. This policy greatly helped the development of ethnic language teaching materials and the training of bilingual teachers and became an indispensable cornerstone of CARE's educational experiment in Ratanakiri. In cooperation with CARE Cambodia and the government (Ministry of Education, Youth, and Sports; MoEYS), a sustainable multilingual education model, HCEP was created to ensure that future generations of minority children in the region can attend school and succeed [30].

3.2 Action Research: Make the Government More Powerful

CARE conducted a round of action research before implementing specific projects [30]. The action research included gathering and responding to different levels of concerns that might arise about the introduction of bilingual education. For example, concerns collected by CARE at the national level included "Bilingual education will lead to the tainting of the national language (p.15)" and other questions about the impact of the use of national languages for bilingual education on national sovereignty and national unity. CARE responded that MoEYS would approve all textbooks before use. Concerns at the provincial class included doubts about the program's quality and that "Ethnic minority teachers are not capable of teaching the national curriculum (p.15)." In this regard, CARE invited MoEYS to become the supervisor and inspected the effectiveness of bilingual education in various places. In addition, the method of CARE operation could be shared and tested. The locals put forward to CARE as they were afraid that people will create a perception that "the national language is more important than the mother tongue (p.15)." CARE said that in the process of the project, it would continue to popularize the value of the first language/native language with the local community elders, teachers, and parents and will reflect the affirmation of the value of the local language in the project. After conducting a round of research and responses to this action from different positions, CARE continued to systematically promote the launch of the bilingual education project in Ratanakiri. Under a throughout consideration, NGOs had become the executive force of the government in the form of partners and provided crucial scientific solutions to minority education problems.

3.3 Community School Boards

The most central point of the HCEP education model was the establishment of Community School Boards [30]. This administrative power established in the face of the local community enabled schools to integrate as many local resources as possible and allowed local people to have a certain right to choose bilingual education independently. Generally, the members selected for the School Board were six influential local elders, and at least two were women. This ingenious setup ensured that the more diverse voices of the community could be conveyed to the decision-making team so that every decision the school makes considers the interests of the local people. The School Board's functions basically maintained the school's operation and development. These comprehensive responsibilities included selecting educational content, selecting local teachers, and encouraging parents to send their children to school.

3.4 Teacher Training Program

The HCEP program had set a strict standard for the recruitment of teachers. First, teachers for bilingual education were selected locally and must be proficient in both Khmer and the local minority language when employed. Second, female community teachers were strongly preferred to be role models for female community students. Once interested applicants were selected from
the community, these 'prospective teachers' would undergo six months of pre-service training and then spent the following year with internships and continuous training [26, 30]. Each training workshop in the internship lasted one week on average. At the end of each workshop, the host and the trainees would have a round-table discussion to establish a platform for exchanging teaching experiences and personal feelings. CARE's Teacher Training Unit (TTU) would provide potentiated teachers with systematic teaching skill upgrading training, usually involving subject knowledge, educational methods, and how to conduct teaching activities. Mathematics and Khmer courses focused on training and teaching content; teachers learned how to better bilingual teaching through interaction and demonstration and how to face different teaching challenges. All this hands-on knowledge and systematic training for new teachers helped mass produce high-quality teachers.

3.5 Curriculum Design
The curriculum design of HCEP bilingual education was refined for each grade. The first grade of primary school used a large proportion of regional languages (80%) to teach and gradually reduced the use of regional languages in students’ growth. CARE hoped students can fully use Khmer to teach in the fourth grade of primary school [31]. Even using the national standard primary school curriculum framework, CARE still had space to draw local knowledge into the curriculum design. A need assessment was conducted with communities to understand the need for learning. CARE also tried its best to balance the relevance of the knowledge in Khmer and the local culture through incorporating non-formal education opportunities for life skills [32]. After completing the first couple of transitional years in ethnic bilingual education, ethnic minority students could choose to receive more advanced courses in Khmer or find jobs with the life skill learned in the program.

4. DISCUSSION
First, the Cambodian government and NGOs create a "joint force" of professional problem-solving skills and political power to provide solutions for rural ethnic education. The strategic action research ensures that the minor level of opposite voice would occur during the implementation of the HCEP program. The need assessment for the curriculum design helps reaching out to the community's relative authentic needs, thus perhaps encouraged community members to join the program or send their children to the program. Creating such a joint force requires the government to identify proper NGOs as action partners accurately. However, since the NGO taxation system remains in a blurry state in China and the source of funding for NGOs may touch the sensitive nerves of Chinese politics, very few international non-profit organizations are active in China [33]. CARE's official website includes organizational activities in 104 countries worldwide but does not have any branch in China. The Chinese rural local government might need to identify and cooperate with local NGOs with similar power to launch evidence-based programs and conduct program evaluations.

The second noteworthy highlight of HCEP is the in-depth community resource recruiting and community building. In the process of school building, the members of the School Board not only provide their own experience and guidance in working in the local area but also significantly establish a network of resources and contacts in the community. Such a setting makes promoting CARE's bilingual education in the local area much smoother. Another advantage of letting the
community take on local educational responsibilities is that it can gain a clearer insight into the educational needs of community members, flexibly set teaching content, or link more social support to provide different educational resources. When community members enjoy the positive feedback of education, they can develop more trust and a sense of ownership of the HCEP project. Recruiting teachers from local areas for vocational training can not only guarantee the native language proficiency for teachers but also provide better stability for community schools’ teaching teams. Those teachers from the same hometown can form a teacher alliance to provide community support and communication opportunities for work experience. The Life skills embedded in non-formal education can fundamentally enhance the region's human capital and expand the potential for local economic growth.

In general, the design of the HCEP project is very suitable for implementation in China if there is a large amount of personal assistance and government investment. The ethnic minorities in China "live in large mixtures and live in small groups (Da Za Ju, Xiao Ju Ju)." The same ethnic group may be scattered in different provinces, and multiple different ethnic groups may live in the same province. This condition will burden the development of minority education in China. The first difficulty that may be encountered is the development of teaching materials. There are many ethnic minorities in China, and their languages are very diverse. It takes many resources to prepare teaching materials for each ethnic group. Community school boards are a good fit for China's collectivist society. The ethnic minorities themselves have a powerful sense of community. If the project can persuade the seniors with high morals and respect in the ethnic group, it can lead many people to send their children to bilingual schools. Choosing teachers from the local area can also increase the trust of students and parents. However, the government must provide comprehensive teacher training, strict and reasonable teacher assessment standards, and relevant professionals to run such a program. Moreover, HCEP is facing the financial challenge that arose from its high-quality bilingual education program [32]. It is not hard to predict that the enormous expenses generate from such a program are also unaffordable for rural Chinese ethnic minority areas.

5. SUMMARY

After closely scrutinizing Chinese ethnic bilingual education, this article found that the main controversy includes the uneven distribution of resources in urban/rural areas and the lack of robust local control over education in rural regions. The Cambodian HCEP program provides much referential value as the program extended the government's function to try out a "good to use" model, then replicate the model to more places in need. There is much inspiration in the design of the HCEP project in Cambodia that could be tried out in China, but not having enough financial support is a problem. The development of education will ultimately promote economic development. Maybe one of China's ethnic minority areas can be selected for pilot projects in the future, and then more investment in successful project models can be made to replicate the success stories in other regions. This paper provides directions for improvement and constructive framework suggestions for the bilingual education of ethnic minorities in China in the future. Bilingual education for ethnic minorities in China shoulders not only the responsibility of education but also the responsibility of helping rural ethnic minorities out of poverty. Future scholars could research how to reduce the cost to realize the project logic of HCEP in China; overall, more research on the topic could help spur the development of projects and the inflow of government funding.
REFERENCES


