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Vietnam Water Resource Assistance Project (VWRAP)
SOCIAL IMPACT ASSESSMENT
for
QUANG HUE RIVER

Edited September 2003
Social Impact Assessment for Quang Hue Subproject

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EXECUTIVE SUMMARY

1. The Quang Hue-Vu River Control Works differ from the other Subprojects of irrigation schemes in Vietnam Water Resource Assistance Project (VWRAP), and this social impact assessment (SIA) reflects the differences. The social assessment concentrates exclusively on the project affected people (PAP), and in consultation with stakeholders there was no need for discussions on present irrigation management and institutional set up for modernising water management, which was not found to be relevant for Quang Hue River Subproject.

2. The Subproject is in response to severe floods from 1998-2000 in which had caused the losses and damages to villages, many human lives, loss of houses, land and crops, and created a new Quang Hue river. The new river brings flood and alluvium, which endanger human lives including the ancient town of Hoi An. The Subproject will directly benefit 155,700 people in two provinces, Quang Nam and Da Nang City, the latter being a highly dynamic city with more than 716,000 inhabitants.

3. Population. The Subproject will affect two communes, Dai Cuong and Dai Hoa, with 3,488 people all of the majority Kinh ethnic group. Agricultural production is the most common source of income for both areas. Whereas rice production is important for both communes they differ, according to a sample survey undertaken in 2003, in structure of agricultural production with the Dai Cuong population having on average more land (25% higher) and the highest rice production (51%) compared to Dai Hoa, which has more upland crops (54%) and garden production (25%). Dai Hoa has also more people engaged in supplementary income from salary and non-agricultural production.

4. Standard of living concerning income in the two communes differs only slightly according to the (small sample) survey. There are more in the lower as well as in the higher end of the income scale in Dai Cuong than in Dai Hoa, which has a more equal income distribution, but the sample is too small to be conclusive. Possession of household good may be more revealing as it shows a pattern in which Dai Hoa people have more furniture, radio cassettes, TV, motorbikes, etc. than Dai Cuong people, who had more boats, pumping machines, and generators, which shows the influence from their different locations with Dai Cuong located in a more remote area and Dai Hoa having a higher frequency of supplementary income. According to MOLISA the poverty ration in the area was 11.5%.

5. Infrastructure. Both the surveyed communes had access road with asphalt surface and electricity. The rural road network was well developed and concreted. Social infrastructure was available with primary schools, health care centre and connection to telecommunication.

6. Resettlement impact. The Project will cause both permanent and temporary impacts on agricultural land, which is currently used for annual crops. In total, there are 72.9 ha agricultural land cultivated by 785 households including two commune People’s Committee Offices, which will be affected. There is no need for relocation due to Project impact, but 606 households will be severely affected due to loss of more than 20% of their agricultural land holding, and 182 households will be marginally affected. A full record of land acquisition and other losses due to the Subproject is provided in the Resettlement Action Plan (RAP).
7. **Stakeholder support.** Local authorities of all levels highly supported the proposed project, considering it as a particularly important factor of socio-economic development of the province. The Quang Hue River Stabilization Project was given the first development priority in the province as well as in the district. The overall benefits of the Project were considered far to outweigh the possible negative impacts.

8. **Community consultation.** Dai Cuong commune and its population fully supported the project and they focused on the devastating damages and potential losses, which had caused them so much damage, and the people were ready to contribute their labour to the project development.

9. Dai Hoa commune on the other hand was concerned about possible negative impacts on their village caused by restoration of the old Quang Hue River. Whereas the authorities supported the Project the community was scared that the revival of the old Quang Hue River would likely be a “death canal.” They foresaw that the bank erosion process would continue along the old Quang Hue banks. Further, a part of Dai Hoa population would not be able to pass the river as freely as they could before. To protect them from such impacts they propose an embankment of the fragile section from around its intake door to the site where the old and new Quang Hue channels meet each other which is a distance of about 3 km.

10. **Water closing** was not envisioned to have any negative impact in any of the communes as they both got water for irrigation from elsewhere.
1. **INTRODUCTION**

1. The Quang Hue-Vu River Control Works seeks to reverse the negative hydrological effects of the years 1998-2000 rainy seasons in which a new Quang Hue River was formed between the Vu Gia and Thu Bon Rivers, destroying land and property of Village No. 8 and 9 and on Gia Bac in Dai Cuong Commune. This new river has severely altered the dry season hydrology and salinity downstream of the VWRAP Subproject area. Now, most of the dry season flow of the Vu River makes its way into the Thu Bon River via the New Quang Hue River. This has negatively affected those households cultivating brackish water aquaculture in Hoi An District. The present lower flows in the Vu Gia River have increased salinity intrusion in the estuary, compromising freshwater supply to Da Nang City as well as decreasing the availability of irrigation water during the dry season.

2. The Vu Gia - Thu Bon Integrated Planning Project (Component) has given a high priority to Quang Hue River stabilization, calling for an investment of a Subproject within the VWRAP. The subproject aims to restore the former balance of water discharge diverted from Vu Gia to Thu Bon, and take control over it, reduce severity of floods in Hoi An and the Thu Bon's downstream during the rainy season, protecting local population from flood dangers and increase water provision for domestic and irrigation needs while protect water quality through reduced salinity intrusion from the sea upstream of Vu Gia in the dry season. This will be achieved through:
   (i) Rehabilitation of the old Quang Hue river through dredging of the river bed;
   (ii) Closing the new Quang Hue low (dry season) flow through land filling and embankments;
   (iii) Embankments of vulnerable sections of Quang Hue and Vu Gia rivers;
   (iv) Construction of hydraulic regulatory works (intake) at the Quang Hue river mouth.

3. The proposed investment is planned to be restricted to Quang Hue river area and includes the riverbank protecting works and water intake regulating works at Quang Hue river mouth to take control over water discharge from Vu Gia to Thu Bon River.

4. All these listed works will pose certain impacts on the local population of two communes Dai Cuong and Dai Hoa of Dai Loc district, Quang Nam province and Da Nang City.

5. The proposed subproject for Quang Hue river stabilization will bring the following benefits:
   (a) Increase of fresh water availability will allow satisfying irrigation needs for 10,000ha of agricultural land downstream of Vu Gia River.
   (b) Improved drainage and reduce flood threats which will protect the population of Dai Cuong commune from possible flood damages and losses caused by severe river bank erosion;
   (c) Protect the downstream area from marine salinity intrusion;
   (d) Rehabilitate Vu Gia downstream flow and reduce river bed alluvium;
   (e) Favour water provision for diverse, multi-purpose, uses, including urban domestic use, irrigation, aquaculture, at the same time as maintaining river flows.
2. QUANG HUE RIVER AND HABITATION

6. The severe floods in years 1998 - 2000 opened a new bed in 1700 m distance upstream from the old Quang Hue, which cleared the entire residential village No 9 and partial other villages including No8 of Dai Cuong commune. The Village No9 now only continues to exist just as a name but it has been totally disappeared from the administrative map. The old Quang Hue riverbed had been filled up with crude alluvium materials, creating barrier preventing the flow discharged to go through. Many other villages of Dai Cuong are in serious threats of the destroying power of Vu Gia River in the flood seasons.

7. According to estimation made by the Dai Loc Provincial People’s Committee the losses experienced by the district and its communes as a consequence of the severe floods in Vu Gia River were recorded as follows:
   - 64 humans lives were lost (died), 124 people were severely wounded;
   - 1885 houses were destroyed, 564 houses were swallowed down through with flood flows;
   - 6482 houses were severely damaged;
   - more than 90% of total district’s population were experienced high inundation, of which
   - 10,000 households sank under 2-3m of water;
   - 200 HHs had to be urgently removed out from their homes during times of floods;
   - 1100 HHs had to be relocated after floods
   - 900 ha of valuable agricultural land were destroyed and/or filled up;
   - numerous HHs lost all their allocated arable land;
   - thousands of hectare of land with annual crops were lost totally;

The total value of losses experience by Dai Loc district in the whole were estimated at 194 billions VND during these three years.

8. Dai Cuong district faces annual threats of Vu Gia devastating floods. In total it has 9 villages among which 7 villages are located along Vu Gia River, which are subject to suffer the annual high and devastating floods. As a consequence the commune’s population have to move off their residences to avoid flood disasters. Since 1975, according to the report of Dai Cuong authority, the commune annually have to relocate from 5 to 10 households out of flood areas to new places to save human lives and properties. Within two years of high flood, there were more than 80 households of the commune who urgently had to move out from highly endangered areas during and after floods. All this created a lot of problems and difficulties for the population and local authority during rehabilitation of the people’s living standards and income generating capacity.

9. As a results of the change in location of the outlet channel from Vu Gia to Thu Bon River the hydrological and bank-morphological characteristics of Vu Gia downstream has been radically changed to the worse for the whole areas downstream, for both Thu Bon and especially Vu Gia river. The consequences of the changes severely impacted the local socio-economic conditions, causing the severe droughts in the followed dry seasons, high intrusion of salinity, which made local water become unsuitable for domestic uses, and caused severe shortages of water in the dynamic City Da Nang.

10. Besides, at the site of the new Quang Hue intake, the destructive power of Vu Gia flood flow is anticipated to accelerate as a in results of difference of river elevation between Vu Gia river bed and New Quang Hue river, and the more straight direction of the Vu Gia stream discharging to the new Quang Hue. All these confront Dai Cuong commune and most of its
hamlets to highly dangerous erosion threats caused by Vu Gia flood flows. At the same time, another outcome of the change is that due to the high gradient of the elevation differences, the new Quang Hue intake can attract almost the entire dry flow of Vu Gia River to the Thu Bon side during the dry season, leaving Vu Gia downstream to become seriously dried, which combine makes life very difficult to the population.

3. SOCIAL ASSESSMENT

3.1. Population and Occupation

11. The Subproject will involve two provinces, Quang Nam and Da Nang City, and two communes, Dai Hoa and Dai Cuong. The expected number of beneficiaries is 155,700 but the beneficiary area is large and it is expected that more than 800,000 people downstream will also benefit from the Subproject, which will provide irrigation to about 10,000 ha of Vu Gia downstream agricultural land. The Project will provide domestic and industrial water for the highly dynamic and fast developing city of Da Nang, an urban centre with more than 716,000 inhabitants. In addition the Subproject construction will reduce flood threats to the ancient historical town Hoi An.

12. The number of project affected people (PAP) are 3,488. All people in the area are of the majority Kinh ethnic group. The average number of persons in each household (HH) among the PAP varies between the communes between 4.4 persons/HH and 4.5 persons/HH with an average of 4.45 persons/HH. The population growth rate was 1.3% in 2001, and the population density was 266 persons per km².

<table>
<thead>
<tr>
<th>Commune</th>
<th>HH size</th>
<th>Ethnic (%)</th>
<th>Sex ratio (%)</th>
<th>Active labors (pers/HH)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (pers)</td>
<td>Size (pers/HH)</td>
<td>Kinh</td>
<td>Other</td>
</tr>
<tr>
<td>Dai Cuong</td>
<td>1153</td>
<td>4.3</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Dai Hoa</td>
<td>2335</td>
<td>4.5</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>3488</td>
<td>4.45</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: results of the IOL of PAP, 2003

13. Agriculture is the most important source of income among the surveyed population. Among the surveyed HH only a few had their main income derived from the non-agricultural sector. However, among the labor active population in the two communes, the non-farm income involves a considerable part of the members surveyed, and it contributed an important portion of the HHs income, especially for Dai Hoa commune, which also have less land/capita.

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1 The figure differ slightly from the one later provided from CPO which is 3.694. In order to obtain consistency the numbers provided in the SIA in June has been maintained.

2 Unfortunately data covering the whole area has not been available and documentation from the specific area relies on a sample survey carried out by the local consultant in June 2003. This survey covered a socio-economic questionnaire, stakeholder consultation at all levels from the province to the communes, including focus group interview with affected people. The local commune authority of Dai Loc and Dai Hoa have carried out the inventory survey in May 2002. Land acquisition and resettlement requirements were estimated based on detailed land use data in each Subproject area and on technical design.
Table 2. Structure of Labor Force in Surveyed Area

<table>
<thead>
<tr>
<th>Occupation structure (%)</th>
<th>Total</th>
<th>Agriculture</th>
<th>Trade</th>
<th>Service</th>
<th>Salary work</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dai Cuong</td>
<td>100</td>
<td>73</td>
<td>0</td>
<td>9</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Dai Hoa</td>
<td>100</td>
<td>66</td>
<td>8</td>
<td>8</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>67</td>
<td>5.1</td>
<td>8.5</td>
<td>10.2</td>
<td>6.8</td>
</tr>
</tbody>
</table>

* Others include industrial workers, retired, small services, and handicrafts.

Source: Socioeconomic surveys 2003.

3.2. Land Holding

14. Most farmers had several plots of land with the average in the two areas being 3.5. Thus for the farmers who will lose portions of their land for which compensation will be paid as land-for-land will not have a new situation as they are used to have plots of land at different places.

Table 3. Average Land Holding in Surveyed Area

<table>
<thead>
<tr>
<th></th>
<th>Total (m²)</th>
<th>Average land holding (m²/HH)</th>
<th>Per capita arable land (m²/pers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dai Cuong</td>
<td>568102</td>
<td>2254</td>
<td>492</td>
</tr>
<tr>
<td>Dai Hoa</td>
<td>867170</td>
<td>1671</td>
<td>369</td>
</tr>
<tr>
<td>Total</td>
<td>1435272</td>
<td>1862</td>
<td>416</td>
</tr>
</tbody>
</table>

Source: Results of Inventory of losses, 2003

15. The average land holding for a household was 1.862 m² or 416 m² per person varying with the lowest in Dai Hoa commune, which has only 25% of the land available to farmers in Dai Cuong commune as shown in table 3.

Table 4. Distribution of Cultivation in Surveyed Areas

<table>
<thead>
<tr>
<th>Commune</th>
<th>Composition of agricultural land</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% garden land</td>
</tr>
<tr>
<td>Dai Cuong</td>
<td>8</td>
</tr>
<tr>
<td>Dai Hoa</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: Results of HH socio-economic survey

16. Table 4 shows another difference between the two communes with more than double of rice production in Dai Cuong (51%) compared to Dai Hoa (21%) which on the other hand had a larger percentage of garden production (25%) compared to Dai Cuong commune in which only 8% had garden production.
17. The main crops of the districts are rice, maize, tobacco, groundnuts and other upland crops. The districts livestock includes bulls, buffalos, pigs, and poultry. The areas also have mining, small industries among other with construction materials, agricultural processing, garment and silk production.

3.3. **Standard of Living**

**A. Income and Assets**

18. Survey results indicate that the majority of project-affected people are in the lower income bracket, but only 9.1% of PAP has per capita monthly income below VND 100,000. The better-off group and wealthy-income group each counts for 27.3% of the total HHs surveyed, indicating a relatively fair economic situation in the communes. Based on the Ministry of Labor Invalids and Social Affairs classification, four income-level categories have been identified:

(i) **Category I:** The poor-income per capita is < VND100,000/month.
(ii) **Category II:** The low-income per capita is from VND100,000-D199,000/month.
(iii) **Category III:** The well-off-income per capita is from VND200,000-D399,000/month.
(iv) **Category IV:** The wealthy-income per capita is > VND400,000/month.

<table>
<thead>
<tr>
<th>Table 5. Levels of Monthly Income in percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample</strong></td>
</tr>
<tr>
<td>Dai Cuong</td>
</tr>
<tr>
<td>Dai Hoa</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: Socioeconomic survey 2003.

19. The ownership of assets by the PAPs surveyed shows that Dai Hoa commune is relatively more wealthy than Dai Cuong commune due to the more favourable location and more diverse economic activities in Dai Hoa than in Dai Cuong. Whereas Dai Hoa has a higher frequency of supplementary income from salary and other craftsmanship (see part 3.1.) Dai Cuong is located in a more remote area and mainly depending on farming and/or fishing as shown in table 6 below.

<table>
<thead>
<tr>
<th>Table 6. Household Goods Among People to be Affected by the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commune</strong></td>
</tr>
<tr>
<td>Dai Cuong</td>
</tr>
<tr>
<td>Dai Hoa</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

20. The general income levels and the difference in location are reflected in household assets. Whereas Dai Hoa had more prestigious furniture, radio cassettes, TV, motorbikes, and bicycles, Dai Cuong had more boats, pumping machines, and generators, which indicate more hardship in access to general facilities and among them fresh water for domestic and agricultural use.
B. Education

21. The educational levels of the farmers surveyed were low with an average number of years in the educational system of 5.5 years. But considering the average age of 54 years among the surveyed people it is a substantial amount of formal education among elderly farmers. Unfortunately we lack data for the total population in order to draw any conclusion on PAP’s status in relation to the total population, but there was a trend that the younger the HH was the more years the person has spend in the educational system. The lack of gender-segregated data also prohibits any conclusion to be drawn concerning women’s educational status.

Table 7. Characteristics of Heads of Households Surveyed

<table>
<thead>
<tr>
<th>Sample (HHs)</th>
<th>HHH sex Male (%)</th>
<th>Average age</th>
<th>Educ. (Grade)</th>
<th>Main Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Farmer</td>
</tr>
<tr>
<td>Dai Cuong</td>
<td>10</td>
<td>100</td>
<td>48</td>
<td>5.8</td>
</tr>
<tr>
<td>Dai Hoa</td>
<td>12</td>
<td>92</td>
<td>59</td>
<td>5.3</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>95</td>
<td>54</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Source: HHs socio-economic survey, 2003

C. Infrastructure Facilities

22. Both the surveyed communes had access roads with asphalt surface and electricity. The rural road network was well developed and concreted. Social infrastructure was available with primary schools, health care center and connection to telecommunication. Household facilities are shown in table 8 below.

Table 8. Household Facilities in Surveyed Areas

<table>
<thead>
<tr>
<th>Lightining</th>
<th>Source of domestic water</th>
<th>Toilet at home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Electricity</td>
<td>other energy</td>
</tr>
<tr>
<td>Dai Cuong</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Dai Hoa</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Socioeconomic survey 2003.

23. Whereas people all had electricity and domestic water from wells, only in Dai Hoa had one quarter of the surveyed population flussing toilets and none in Dai Cuong had toilets.

3.4. Gender and Poverty

24. The sex ration in the two communes was 51% male and 49% female, which is a natural distribution in societies without severe social stress such as war, illness, or heavy gender discrimination (in which baby boys are preferred). However, in the Subproject area there was a relatively high ratio of female-headed households in both communes, between one and two thirds of the total households. The explanation given was that this was a consequence of the war during which many of the men have died. With an almost equal gender distribution within society at the same time as a large number of female headed households leads to a conclusion that either the

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3 The survey sample also had a heavy overweight of males with 95% males in the sample.
younger generation have a heavy male dominance, or women have a very particular position in the area, whatever that may be.

25. The poverty ration is 11.5% by MOLISA standard. The ratio of HH having per capita monthly income lower than 100,000 VND of the HHs surveyed were lower than the poverty rate average for the communes, which was 10% for Dai Cuong and 8.3% for Dai Hoa.

3.5. Social Impact Assessment

26. The Project will cause both permanent and temporary impacts on agricultural land, which is currently used for annual crops. In total, there are 72.9 ha agricultural land cultivated by 785 HHs including two commune People’s Committee Offices which will be affected. Among these there are 14.5 ha land cultivated by 148 HHs, which will suffer permanent losses due to acquisition of the "borrowed" area. The remaining 58.3 ha land used by 639 HHs will be lost "temporarily" due to disposal of dredged materials. 606 HHs will be severely affected due to loss of more than 20% of their agricultural land holding. There is no HH losing their house due to the subproject intervention. Most of the land to be acquired from project-affected people is under legal, long-term user rights. About 19.1 ha (of which 3.3 ha of Dai Cuong and 15.8 ha of Dai Hoa communes) are under commune's management. A full record of land acquisition and other losses due to the Subproject is provided in the Resettlement Action Plan (RAP).

4. CONSULTATION, INFORMATION DISSIMUNATION AND PARTICIPATION

27. All stakeholders consulted share the opinion that the Subproject was important and it was necessary to change the destructive implications of the new Quang Hue flow. Local authorities at all levels highly supported the Project, which they found a particularly important factor in socio-economic development for their area.

28. Opinions and concerns of the local population have been taken in feedback discussion with local authority and technical specialists to identify measures for mitigation of negative impacts and increase project's benefits.

4.1. Consultation with Quang Nam Province

29. The Quang Hue River Stabilization Project is given first priority among the eleven areas selected for investment in the Thu Bon Basin Integrated Planning (TBIP).

30. Vu Gia River plays a crucial important role, satisfying multiple water needs for socio-economic development of Quang Nam province and Da Nang City. In the middle catchments area, Vu Gia River has a relatively narrow profile of the riverbed, comparing to that of Thu Bon River. However, the water discharge volume of Vu Gia is great and contains a lot of suspended, solid or alluvium, materials. The latter implicates a rapid sedimentation and filling up on the riverbed and leads to consequent elevation, which is often followed by accelerating a winding of the bed and changes in the river direction. Quang Hue River plays a role as an outlet channel of Vu Gia to Thu Bon River, discharging part of its flow to Thu Bon river. Recently, before the severe flood years, through the old Quang Hue, there were about 15-17% of Vu Gia's flood flow had been discharged into the Thu Bon river, when during the dry season, at time of the low river flow, the low water in Vu Gia could be maintained on its channel, serving water needs for cultivation of fields and Da Nang City on the left bank.
31. Recently it was reported that the residence in fighting against the devastating impacts of Vu Gia floods in an attempt to protect their arable land, properties and human beings, the Dai Cuong population have tried to reinforce the bank, by planting trees and make embankment around and filling up the intake door of the new Quang Hue in an efforts to close or at least to limit the flood flows passing through. The district and provincial authority have recognized such spontaneous initiatives by the Dai Cuong population. The Quang Nam PPC has provided financial supports to this initiative. However, according to opinions of the provincial and district's authorities, all these local efforts have just been a temporary responses to the emergency situations and the results of the lack of capital for investment, but it is not the long-term solutions. To solve the problems of the new Quang Hue River a well-designed investment project is needed, and it will also likely be far exceeding the financial capacity of the province. In this context, the Quang Hue River Stabilization Subproject fully meet the local development needs.

4.2. Consultation with Dai Loc District

32. According to opinions of Dai Loc district's authority, the Quang Hue subproject will only bring benefits without negative impacts for the district and its population. Closing the new Quang Hue channel and rehabilitation of the old Quang Hue river by reinforced or consolidated embankment of the fragile right bank of Vu Gia river around the Quang Hue, at Dai Cuong commune, will reduce flood damages for Duy Xuyen district with the ancient town Hoi An during the rainy season. Rehabilitation will also restore the former water flow in Vu Gia River, needed for irrigation, domestic uses, while preventing the land and local inland water sources from salinity pollution. The benefits has been evaluated to be extremely positive, while the negative implications of the proposed project have been assessed to be small if the risk preventive proposed measures will be placed appropriately.

4.3. Consultation with Dai Cuong Commune

33. The results of consultations with Dai Cuong commune have confirmed the high priority for the project, and the full support from the commune's authority and all its residents. All the officials and people interviewed have expressed their great desire for the project investment, considering that they do not have to continue moving away from their home, that their villages and arable land will be protected and that at the new Quang Hue channel site through the Subproject land will even be restored for cultivation. The project will also favour restoration and development of waterway transport along the Vu Gia River. All the people consulted shared the general opinion towards the benefits of the project, and expressed their willingness to devote their land for project implementation. According to them, the possible negative impacts will be very small in comparisons to the overall benefits of the project.

4.4. Consultation with Dai Hoa Commune

34. Contrary to Dai Cuong commune, the authority and people of Dai Hoa commune were very much concerned about the negative impacts of the proposed project. Although Dai Hoa commune and its population also had been victims of Vu Gia floods, just like Dai Cuong commune where many of its villages had repeatedly suffered land and house losses and subjected to be removed from the river side due to annual floods, they did worry about possible negative consequences for human beings as well as for production if the old Quang Hue canal was to be rehabilitated. The commune people felt that if the proposed project would revive the old Quang Hue it would likely be a "death" channel. They foresaw that the bank erosion process would
continue along the old Quang Hue banks. Further, a part of Dai Hoa population would not be able to pass the river as freely as they could when the old river was in inactive status. To reduce such possible negative impacts of the bank erosion of the old Quang Hue, the Dai Hoa population and authority asked the Project to make necessary embankment along the old Quang Hue River, from around its intake door to the site where the old and new Quang Hue channels meet each other.

4.5. Consultation with Dai Hoa Communities

35. The Dai Hoa people interviewed share opinions that the proposed rehabilitation of the old Quang Hue may be unsustainable as it is against the natural winding process of the river dynamics. The evidence of this opinion is that during the 1970s, the Quang Nam authority with its population had dredged the river bed of the old Quang Hue, but now the river had been filled up again, so that the flow from Vu Gia had been hindered, leading to formation of a new Quang Hue flow as a response to the situation.

4.6. Impact from Water Closing

36. Dai Cuong. According to the report of the Dai Cuong authority and its population, the commune got irrigation water from the Khe Tan reservoir, thus the closing of river flow for civil works was not likely to impact the commune.

37. Dai Hoa. The closing of the river for civil work would not have impacts on local conditions of Dai Hoa commune.