## **Project Profile of Priority Projects along the Asian Highway**

- 1. Project Name: NR 78 (AH 11 Feeder Road) Road Improvement Project 1
- **2. Location:** From NR7 (AH 11) Junction to Banlung (Rattanak Kiri Provincial Center), North-Eastern Cambodia.
- 3. Brief outline of the project: The project road links the Asian Highway (AH 11) and is located about 460 km from Phnom Penh, Provincial Center Banlung of Rattanakiri Province which is ecotourism center of the country. The existing gravel road is in very poor condition and during rainy season it is very difficult to pass. The project will improve 125 km of laterite road replacing with 7 m DBST (double bituminous surface treatment) standard of carriageway and 2 m laterite shoulder on both sides. The horizontal and vertical alignment of NR 78 will not change. There are 33 box/pipe culverts and 40 bridges which will be replaced. This project will include a special subcontractor to confirm the absence of landmines and unexploded ordinance (UXO), especially in areas of the borrow pits, where the standard mine-clearing depth may not be sufficient.

### 4. Rationale and objectives

- Poverty reduction of people living in Rattanak Kiri;
- Facilitate delivery of social service, education health care;
- Enhance Economy Development of Cambodia;
- Exploit the Agro-industrial Area;
- Trade exchange between Cambodia and Viet Nam;
- Facilitate the tourist transport.

# 5. Scope of works:

- 7 m of carriageway with DBST and 2 m gravel shoulder;
- Replace or repair of 33 box/ pipe culverts;
- Replace or repair of 40 bridges; length 593 m
- Clearance of landmines and unexploded ordinance.

## 6. Expected impacts and benefits:

- Benefits:
- Reduce the people poverty through increasing of tourist;
- Promote investment in Agro-industrial area;
- Increase trade exchange between Cambodia and Viet Nam
- Improve accessibility to the health center, school etc.
- Reduce traveling time
- Reduce vehicle operation cost
- Reduce dust
- Impacts:
- The minority people living in that area could be affected with the HIV
- 7. Estimated cost (in US \$): 44 million
- 8. Project duration: 28 Months
- 9. Proposed project financing arrangements: China is considering to fund the Project. The project The accounting will be managed by the Project Implementation Unit (PIU). The accounting and financial statement should be prepared every month. The PIU shall prepare annual project financial statement in a format acceptable to the donor. To reach acceptable standards of financial management an international recognized auditing firm will be selected to provide on site financial and accounting advice. An independent auditor acceptable to the donor should be hired to audit the project.

**10. Implementation arrangements:** The Project Implementation Unit of the Ministry of Public Works and Transport will be set up for administration, management and supervision of the Project.

For supervising civil works international consultant should be selected based on quality and cost based selection method.

For civil work contract the national competitive bidding (NCB) should be used.

## 11. Current status:

- a. difficult to pass in the rainy season
- b. the road is in bad condition
- c. the road surface is covered by gravel

## 12. Critical success factors:

# 13. Other project related information:

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- 1. **Project Name:** NR 78 (AH 11 Feeder Road) Road Improvement Project 2
- **2. Location:** From Banlung (Rattanak Kiri Provincial Town) to Cambodia/Viet Nam Border
- 3. Brief outline of the project: The project road provides link to the Provincial Center (Banlung) of Rattanak Kiri Province, a tourism destination in Cambodia to Viet Nam border. The existing laterite road is in very poor condition. The project will improve 78 km of laterite road by 7m DBST of carriageway and 2 m of gravel shoulder on both side. The horizontal and vertical alignment of NR 78 will not change. 2 culverts and 1 bridge will be replaced or repaired. This project will include a special sub-contractor to confirm the absence of landmines and unexploded ordinance (UXO), especially in areas to be excavated and where the standard mine-clearing depth may not be sufficient.

- Poverty reduction of people living in Rattanakiri;
- Facilitate delivery of social and welfare services;
- Enhance economy development of Cambodia;
- Exploit the agro-industrial Area;
- Trade exchange between Cambodia and Viet Nam;
- Facilitate the tourist transport;

## 5. Scope of works:

- 7 m carriageway with 2 m laterite shoulder
- Replace or repair of 2 box/pipe culverts;
- Replace or repair of 1 bridge; Length=26 m;
- Clearance of landmines and unexploded ordinance.

# **6.** Expected impacts and benefits:

#### **Benefits:**

- Reduce the people poverty through tourist increasing;
- Promote the investment in agro-industrial area;
- Increase trade exchange between Cambodia and Viet Nam
- Improve accessibility to the health center, school etc.
- Reduce traveling time
- Reduce vehicle operation cost
- Reduce dust

# Impacts:

• The minority people living in that area could be affected with the HIV

## 7. Estimated cost (in US \$): 27 million

- **8. Project duration:** 24 Months
- **9. Proposed project financing arrangements:** Funding support is being sought from international banks and financing institutions.

The accounting will be managed by the Project Implementation Unit (PIU). The accounting and financial statement should be prepared every month. The PIU shall

prepare annual project financial statement in a format acceptable to the donor. To reach acceptable standards of financial management an international recognized auditing firm will be selected to provide on site financial and accounting advice. An independent auditor acceptable to the donor should be hired to audit the project.

# 10. Implementation arrangements:

The Project Implementation Unit of the Ministry of Public Works and Transport will be set up for administration, management and supervision of the project.

For supervising the civil works the international consultant should be selected based on quality and cost based selection method.

For the civil work contract the national competitive bidding (NCB) should be used.

## 11. Current status:

- difficult to pass in the rainy season
- the road is in bad condition
- the road surface is covered by gravel and it is very dusty

#### 12. Critical success factors:

### 13. Other project related information:

**14. Contact address:** Dr. Hong Sinara, Deputy Director General of Public Works, Ministry of Public Works and Transport, Phnom Penh, Cambodia, Tel/Fax: (855-23) 723028, Email: <a href="mailto:hongsinara@yahoo.com">hongsinara@yahoo.com</a>

- 1. Project Name: NR 57 (AH 1 Feeder Road) Road Improvement Project
- **2. Location:** Battambang to Cambodia/Thailand border via Pailin
- 3. Brief outline of the project: The project road provides link to the Asian Highway (AH 1) located at Battambang Provincial Town to the Cambodia/Thailand border via Pailin. The existing laterite road is very poor condition especially in rainy season it is very difficult to pass. The Project will improve 113 km of laterite road replacing by 7 m DBST standard carriageway and 2 m laterite shoulder on each sides. The horizontal and vertical alignment of NR 57 will not change. 77 pipe/box culverts and 14 bridges will be replaced or repaired. This project will include a special sub-contractor to confirm the absence of landmines and unexploded ordinance (UXO), especially in areas to be excavated and where the standard mine-clearing depth may not be sufficient.

- Poverty Reduction of people living in Pailin and in North Western of the country;
- Facilitate delivery of social and welfare services;
- Enhance Economy Development of Cambodia;
- Trade exchange between Cambodia and Thailand;
- Exploit the Agro-industrial Areas
- Facilitate the tourist accessibility.

## 5. Scope of works:

- 7 m carriageway with 2m laterite shoulder
- Replace or repair of 77 box/pipe culverts
- Replace or repair of 14 bridges, Total Length 400 m
- Clearance of landmines and unexploded ordinance.

# 6. Expected impacts and benefits:

### **Benefits:**

- Reduce the people poverty through tourist increasing;
- Promote the investment in Agro-industrial area;
- Increase trade exchange between Cambodia and Viet Nam
- Improve accessibility to the health center, school etc.
- Reduce traveling time
- Reduce vehicle operation cost
- Reduce dust

### **Impacts:**

- The minority people living in that area could be affected with the HIV
- 7. Estimated cost (in US \$): 40 million
- **8. Project duration:** 28 Months
- 9. Proposed project financing arrangements: Funding support is being sought from

international banks and financing institutions and bilateral donors.

The accounting will be managed by the Project Implementation Unit (PIU). The accounting and financial statement should be prepared every month. The PIU shall prepare annual project financial statement in a format acceptable to the donor. To reach acceptable standards of financial management an international recognized auditing firm will be selected to provide on site financial and accounting advice. An independent auditor acceptable to the donor should be hired to audit the project.

**10. Implementation arrangements:** The Project Implementation Unit of the Ministry of Public Works and Transport will be set up for administration, management and supervision of the project.

For supervising the civil works the international consultant should be selected based on quality and cost based selection method.

For the civil work contract the national competitive bidding (NCB) should be used.

#### 11. Current status:

- difficult to pass in the rainy season
- the road is in bad condition
- The road surface is covered by gravel and it is very dusty.

#### 12. Critical success factors:

#### 13. Other project related information:

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- 1. Project Name: NR 61 (connect AH 1 & AH 11) Road Improvement Project.
- **2. Location:** Preak Kdam (AH 1) to Thnal Keng (AH 11)
- 3. **Brief outline of the project:** The project road provides links to the Asian Highway (AH 1) at Preak Kdam and the Asian Highway AH 11 at Thnal Keng. The project will improve the 16 km current sealed road with high International Roughness Index (IRI) to the Asian Highway standard. The standard road design cross section is 7 m DBST and 2 m paved shoulder on each side. There are no structures crossing the road. The horizontal and vertical alignment of NR 61 will not be changed.
- 4. Rationale and objectives:
  - Link two Asian Highway (AH 1 & AH 11) bypass Phnom Penh capital center;
  - Reduce traffic volume crossing Phnom Penh;
  - Save traveling time;
  - Reduce vehicle operation cost;
  - Enhance economic development of Cambodia;
- **5. Scope of works:** 7 m DBST carriageway with 2 m DBST shoulder; No structure work will be carried out.
- **6.** Expected impacts and benefits:

#### **Benefits:**

- Reduce the poverty;
- Contribute to the development of Cambodia's economy;
- Reduce traveling time;
- Reduce vehicle operation cost;
- Reduce significantly the transport cost;
- Reduce traffic jam in Phnom Penh;
- 7. Estimated cost (in US \$): 6 million
- **8. Project duration:** 12 Months
- **9. Proposed project financing arrangements:** Funding support is being sought from international banks and financing institutions and bilateral donors.
- **10. Implementation arrangements:** The Project Implementation Unit of the Ministry of Public Works and Transport will be set up for administration, management and supervision of the project.
  - For supervising the civil works the international consultant should be selected based on quality and cost based selection method. For the civil work contract the national competitive bidding (NCB) should be used.
- 11. Critical success factors:
- 12. Other project related information:
- **13. Contact address:** Dr. Hong Sinara, Deputy Director General of Public Works, Ministry of Public Works and Transport, Phnom Penh, Cambodia, Tel/Fax: (855-23) 723028, Email: hongsinara@yahoo.com

- 1. Project Name: NR 76 (AH 11 feeder road) Road Improvement Project
- **2. Location:** NR 7 Junction- Sen Monorom (Mondul Kiri) Banlung (Rattanakiri Provincial Town).
- 3. Brief outline of the project: The project road provides link to the Asian Highway (AH 11) at Snoul about 257 km from Phnom Penh with Provincial Center (Senmonorom) of Mondulkiri Province (a tourist destination in Cambodia) and further connection to Banlung (Rattanakiri). The existing laterite road is in very poor condition. The road stretch on the mountainous areas is susceptible to erosion during rainy season. The project will improve 335 km of laterite road to 7 m wide carriageway with DBST standard and 2 m laterite shoulder. Some of the road sections are currently missing and impassible. The horizontal and vertical alignment will be changed accordingly to meet the safety standard. It will contribute to reduce traffic accident in the future. Culverts and bridges will be replaced or repaired. This project will include a special subcontractor to confirm the absence of landmines and unexploded ordinance (UXO), especially in areas to be excavated and where the standard mine-clearing depth may not be sufficient.

- Poverty Reduction of people living in Kratie, Mondolkiri and Rattanakiri;
- Facilitate delivery of social and welfare services;
- Enhance economic development of Cambodia;
- Exploit agro-industrial area;
- Enhance trade exchange between Cambodia and Viet Nam;
- Facilitate tourism:

### 5. Scope of works:

- 7 m bituminous carriageway with 2m laterite shoulder;
- Replace or repair of box and pipe culverts;
- Replace or repair of bridges;
- Clearance of landmines and unexploded ordinance.

### 6. Expected impacts and benefits:

#### **Benefits:**

- Reduce people poverty through enhancing tourism potential;
- Promote investment in Agro-industrial area;
- Increase trade exchange between Cambodia and Viet Nam
- Improve accessibility to the health center, school etc.
- Reduce traveling time
- Reduce vehicle operation cost
- Reduce dust

### **Impacts**:

• The minority people living in that area could be affected with the HIV

## 7. Estimated cost (in US \$): 44 million

### **8. Project duration:** 28 Months

- **9. Proposed project financing arrangements:** Funding support is being sought from international banks and financing institutions and bilateral donors. The accounting will be managed by the Project Implementation Unit (PIU). The accounting and financial statement should be prepared every month. The PIU shall prepare annual project financial statement in a format acceptable to the donor. To reach acceptable standards of financial management an international recognized auditing firm will be selected to provide on site financial and accounting advice. An independent auditor acceptable to the donor should be hired to audit the project.
- **10. Implementation arrangements:** The Project Implementation Unit of the Ministry of Public Works and Transport will be set up for administration, management and supervision of the project.

For supervising the civil works the international consultant should be selected based on quality and cost based selection method. For the civil work contract the national competitive bidding (NCB) should be used.

#### 11. Current status:

- difficult to pass in the rainy season
- the road is in bad condition
- the road surface is covered by laterite and it is very dusty.

### 12. Critical success factors:

## 13. Other project related information:

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- 1. Project Name: NR 73 (AH 11 Feeder Road) Road Improvement Project
- **2. Location:** NR7 Junction of AH 11 to Chhlong (Kratie Province)
- 3. Brief outline of the project: The project road provides links to the Asian Highway (AH 11) at kilometer 150 from Phnom Penh and Chhloung, district center of Kratie Province. There are many people living in this area along the Mekong River and has big agriculture production and light industry potential. The existing laterite road is in fair condition but the health of people living along that road is affected by dust caused by increasing traffic every day. The project will improve 57 km of gravel road to a 7 m wide DBST standard carriageway and 2 m laterite shoulder. The horizontal and vertical alignment will not be changed significantly. 46 box/pipe culverts and 7 bridges will be replaced or repaired. This project will include a special sub-contractor to confirm the absence of landmines and unexploded ordinance (UXO), especially in areas to be excavated and where the standard mine-clearing depth may not be sufficient.

- Poverty reduction in Chhlong communes district;
- Facilitate delivery of social and welfare services;
- Enhance economic development of Cambodia
- Exploit agriculture and industrial area;

# **5.** Scope of works:

- 7 m carriageway with 2 m laterite shoulder;
- Replace or repair of 46 box/pipe culverts;
- Replace or repair of 7 bridges; length 219 m
- Clearance of landmines and unexploded ordinance.

# 6. Expected impacts and benefits:

### **Benefits:**

- Reduce poverty;
- Improve commercial and trade in the areas
- Promote the investment in agriculture and light industries;
- Improve accessibility to the health center, school etc.
- Reduce traveling time;
- Reduce vehicle operation cost;
- Reduce dust.

### **Impacts:**

- The people living in the area could be affected with the HIV
- 7. Estimated cost (in US \$): 20 million
- **8. Project duration:** 28 Months
- **9. Proposed project financing arrangements:** Funding support is being sought from international banks and financing institutions and bilateral donors. The accounting will be managed by the Project Implementation Unit (PIU). The accounting and financial statement should be prepared every month. The PIU shall prepare annual project financial statement in a format acceptable to the donor. To reach acceptable standards of financial management an international recognized auditing firm will be selected to

provide on site financial and accounting advice. An independent auditor acceptable to the donor should be hired to audit the project.

**10. Implementation arrangements:** The Project Implementation Unit of the Ministry of Public Works and Transport will be set up for administration, management and supervision of the project.

For supervising the civil works the international consultant should be selected based on quality and cost based selection method.

For the civil work contract the national competitive bidding (NCB) should be used.

#### 11. Current status:

- the road is in fair condition
- the road surface is covered by laterite and is very dusty

### 12. Critical success factors:

### 13. Other project related information:

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- **1. Project Name**: East-West Corridor Road Improvement Project (Siem Reap-Stung Treng)
- 2. Location: Siem Reap Stung Treng to Rattanakiri
- 3. Brief outline of the project: The project road provides link to the Asian Highway No 1 (AH 1) and AH 11 via Siem Reap Angkor Wat, the world famous ancient temples of Cambodia, connecting to ecotourism center in Rattanakiri Province and further connection to Viet Nam. The project will facilitate tourism development within Cambodia as well as from Thailand and Viet Nam to visit Angkor Wat. The improvement of this project will open a new Asian Highway connecting Bangkok to Quinhon Seaport in Viet Nam. The existing gravel road is in poor condition especially in the rainy season some sections are very difficult to pass or are impassible. The project will improve 253 km of gravel road to a 7 m wide DBST standard carriageway and 2 m gravel shoulder on each side. Some place of the horizontal and vertical alignment will be modified. Culverts and bridges will be replaced or repaired. This project will include a special sub-contractor to confirm the absence of landmines and unexploded ordinance (UXO), especially in the areas to be excavated and where the standard mine-clearing depth may not be sufficient.

- Poverty reduction;
- Facilitate delivery of social and welfare services;
- Enhance economic development of Cambodia;
- Exploit agriculture areas;
- Enhance trade exchange between Cambodia, Thailand and Viet Nam;
- Enhance and facilitate tourism growth and accessibility;

## 5. Scope of works:

- 7 m of bituminous carriageway with 2 m gravel shoulder;
- Replace or repair of box and pipe culverts;
- Replace or repair of bridges;
- Clearance of landmines and unexploded ordinance.

## 6. Expected impacts and benefits:

### **Benefits:**

- Reduce poverty through increasing tourism;
- Promote investment in agriculture and agro-industrial areas;
- Increase trade exchange between Cambodia Thailand and Viet Nam;
- Improve accessibility to the health center, school etc.
- Save traveling time;
- Reduce vehicle operation cost;
- Reduce dust.

#### **Impacts:**

- The people living in that area could be affected with the HIV
- 7. Estimated cost (in US \$): 260 Million
- **8. Project duration:** 40 Months
- **9. Proposed project financing arrangements:** Project finance is being sought form bilateral donors, international development banks and financing institutions. The accounting will be managed by the Project Implementation Unit (PIU). The accounting and financial statement should be prepared every month. The PIU shall prepare annual

project financial statement in a format acceptable to the donor. To reach acceptable standards of financial management an international recognized auditing firm will be selected to provide on site financial and accounting advice. An independent auditor acceptable to the donor should be hired to audit the project.

**10. Implementation arrangements:** The Project Implementation Unit of the Ministry of Public Works and Transport will be set up for administration, management and supervision of the Project.

For supervision of civil works international consultant should be selected based on quality and cost based selection method.

For the civil work contract the national competitive bidding (NCB) should be used.

#### 11. Current status:

- 1. difficult passable in the raining season
- 2. the road is in bad condition
- 3. the road surface is covered by gravel and it is very dusty

#### 12. Critical success factors:

# 13. Other project related information:

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