# Resettlement Plan

June 2017

THA: Greater Mekong Subregion Highway Expansion Phase 2 Project

Prepared by the Department of Highways and Public Debt Management Office for the Asian Development Bank.

#### **CURRENCY EQUIVALENTS**

(as of 30 April 2017)

Currency unit – baht (B) B1.00 = \$0.02891 \$1.00 = B34.5866

#### **ABBREVIATIONS**

ADB Asian Development Bank AHs Affected Households Affected Persons APs COA Corrective Action Plan DMS **Detailed Measurement Survey** DOH Department of Highways EΑ **Executing Agency** Grievance Redress Mechanism GRM Inventory of Loss IOL MOT Ministry of Transport Non-government organization NGO **Public Information Booklet** PIB PMU **Project Management Unit** \_ RP Resettlement Plan ROW Right of Way Social assessment SA Socioeconomic Survey SES SIA Social impact assessment SPS Safeguard Policy Statement

#### **NOTE**

In this report, "\$" refers to US dollars.

This resettlement plan is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the "terms of use" section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

#### **Definitions of Terms**

Affected persons (APs)/ Community/ Households (AHs)

Refers to any person or persons, customary or local community, private or public institution who are displaced (physical or economic) as result of temporary impacts during construction, restriction on land use or on access to legally designated parks and protected areas. The affected community/ households/ person are those who utilize, control, or possess the affected land or non-land objects.

Compensation

Payment in cash or in kind (e.g. land-for-land) to replace losses of land, housing, income and other assets caused by the Project. All compensation is based on the principle of replacement cost, which is the method of valuing assets to replace the loss at current market value, and any transaction costs such as administrative charges, taxes, registration and titling costs. In the absence of functioning markets, a compensation structure is required that enables affected people to restore their livelihoods to level at least equivalent to those maintained at the time of dispossession, displacement, or restricted access.

Cut-off date

Refers to the date prior to which the occupation or use of the project area makes residents/users of the same eligible to be categorized as AP, regardless of tenure status. In this project, the cut-off date will be the final day of the census of APs and the detailed measurement survey (DMS) of APs' land and/or nonland assets. APs will be informed of the cut-off date for each project component, and any people who settle in the subproject area after the cut-off date will not be entitled to compensation and assistance under the project.

Displaced Persons (DPs)

In the context of involuntary resettlement, displaced persons are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas (ADB IR Source Book, 2012).

Eligibility

Refers to any person who has settled in the subproject area before the cut-off date that suffers from (i) loss of shelter, (ii) loss of assets (land, space above and below the surface of the land, buildings, plant, and objects related to the land) and/or or ability to access such assets, permanently or temporarily, or (iii) other losses that can be appraised. such as transaction costs, interest, on loss of residual land, loss of income sources or livelihood regardless of relocation, profession shift, and other types of loss stated by the assignor, will be entitled to compensation and/or assistance).

Entitlement

A range of measures comprising compensation, income restoration support, transfer assistance, income substitution, relocation support, etc. which are due to the AHs, depending on

the type and severity of their losses, to restore their economic and social base.

Inventory of loss

The listing of assets as a preliminary record of affected or lost assets during the preparation of the RP where all fixed assets (i.e., land used for residence, commerce, agriculture; dwelling units; stalls and shops; secondary structures, such as fences, tombs, wells; standing crops and trees with commercial value; etc.) and sources of income and livelihood inside the Subproject boundaries are identified, measured, their owners identified, their exact location pinpointed, and their replacement costs calculated. The severity of impact on the affected assets and the severity of impact on the livelihood and productive capacity of the APs are likewise determined.

Involuntary resettlement

Refers to physical and economic displacement as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. Such displacement can be full or partial, permanent or temporary.

When the displaced persons have no right to refuse the land acquisition by the state that result in their displacement. This occurs when land is acquired through (i) expropriation by invoking the eminent domain power of the state, or (ii) land is acquired through negotiated settlement when the pricing is negotiated in a process where expropriation will be the consequence of a failure in the negotiation. (ADB IR Source Book, 2012)

Livelihood restoration

This involves re-establishing productive livelihood of the displaced persons to enable income generation equal to or, if possible, better than that earned by the displaced persons before the resettlement (ADB IR Source Book, 2012).

Livelihood Assistance Support Program This is a program designed with various activities that aim to support affected persons to recover their income / livelihood to pre-subproject levels. The program is designed to address the specific needs of the affected persons based on the socioeconomic survey and consultations.

Rehabilitation

Assistance provided in cash or in kind to project APs (especially the vulnerables) due to the loss of productive assets, incomes, employment or sources of living, to supplement payment of compensation for acquired assets, in order to achieve, at a minimum, full restoration of living standards and quality of life.

Relocation

The physical displacement of an AP from her/his pre-project place of residence and/or business.

Replacement cost

The value enough to replace affected assets and/or cover transaction costs necessary to replace the affected assets without depreciation for such assets as well as material advantage, taxes and/or travel expenses.

Resettlement Plan

The social safeguard document that contains the policies and guidelines and time-bound action plan with budget, setting out the resettlement objectives and strategies, entitlements, activities and responsibilities, resettlement monitoring, and resettlement evaluation.

Severely affected persons

Those who experience significant/major impacts due to (i) losses of 10% or more of their total productive land, assets and/or income sources due to the project; and/or (ii) relocation due to insufficient remaining residential land to rebuild.

Vulnerable groups

Distinct groups of people who might suffer disproportionately or face the risk of being marginalized by the effects of resettlement and specifically include: (i) households headed by women, elderly, or disabled, (ii) households falling under the generally accepted indicator for poverty, (iii) landless households, and (iv) ethnic minorities.

# **Table of Contents**

| Currency Equivalents  | ii                   |
|---|----------------------|
| Abbreviations   | ii                   |
| Definitions of Terms  | iii                  |
| Table of Contents   | vi                   |
| List of Tables  | viii                 |
| List of Figures   | viii                 |
| Executive Summary   | ix                   |
| I. Project Description  A. Overall Project Description  B. Civil Works to Be Undertaken  C. Measures to Minimize Impacts  | 1<br>2               |
| II. Scope of Resettlement Impacts  A. Project Coverage  B. Data Sources  C. Project Impacts and Affected Households  D. Summary of Resettlement Impacts                                       | 7<br>9               |
| A. The Project Area B. Results of the Socioeconomic Survey on Affected Households   | 12                   |
| IV. Consultation and Participation, and Information Disclosure  A. Consultation and Participation  B. Disclosure of Information   | 18                   |
| V. Grievance Redress Mechanisms  A. Modes of Receiving Grievances  B. Grievance Resolution Process  | 20                   |
| VI. Legal Framework  A. National and Local Policy Framework  B. ADB Safeguards Policy  C. Comparison of Government Law and Regulations with ADB Policies  D. Project Policies on Resettlement | 22<br>24<br>26       |
| VII. Entitlements, Assistance and Benefits.  A. Project Eligibility and Entitlements  | 28<br>29<br>31<br>31 |
| VIII. Resettlement Budget and Financing Plan  | 32                   |
| IX. Institutional Arrangements  A. Implementation Arrangements  |                      |

| B. Implementation Schedule of the RP and RP Updating | 35 |
|--|----|
| X. Monitoring and Reporting                          | 35 |
|  |    |
| A. Monitoring Arrangements                           | 36 |
| C. Reporting and Disclosure                          | 37 |
| Appendix 1. IOL and SES Dummy Tables                 | 38 |
| Appendix 2. List of AHs by Impact                    | 47 |
| List of AHs Due to Loss of Shops                     | 47 |
| List of AHs Due to Loss of Paddies                   | 49 |
| List of AHs with Impacts 10% or More (Severe)        | 51 |
| List of AHs Deemed Vulnerable                        | 51 |
| Appendix 3. Consultations                            | 53 |
| Appendix 4. Draft Project Information Booklet        |    |
| English VersionThai Version                          | 65 |
| Thai Version   | 69 |

# **List of Tables**

| Table 1. Places Traversed by NH22 and NH23  | 7  |
|---|----|
| Table 2. Scope of Project Impacts   | 9  |
| Table 3. Types of Affected Shops by Road Segment  | 10 |
| Table 4. Materials of Affected Shops by Road Segment  | 10 |
| Table 5. Vulnerable AHs   | 11 |
| Table 6. Severity of Impact on AHs  | 12 |
| Table 7. Summary of Impacts   | 12 |
| Table 8. Age and Gender of AH Heads by Road Segment   | 13 |
| Table 9. Civil Status of HH Heads and HH Size by Road Segment   | 14 |
| Table 10. Educational Attainment and Physical Condition of HH Heads by Road Segment   | 14 |
| Table 11. Ethnicity and Religion of HHs by Road Segment   |    |
| Table 12. Primary Source of HH Monthly Income by Road Segment   | 15 |
| Table 13. Secondary Source of HH Monthly Income by Road Segment   | 15 |
| Table 14. HH Monthly Income and Expenditure by Road Segment   | 15 |
| Table 15. Land Area (sqm) by Land Use of HHs by Road Segment  |    |
| Table 16. Proof of Land Ownership of HHs by Road Segment  | 16 |
| Table 17. Common Ailments   |    |
| Table 18. HH Water Sources HHs by Road Segment  |    |
| Table 19. Lighting and Cooking Fuel Sources of HHs by Road Segment  |    |
| Table 20. Toilet Facilities of HHs by Road Segment  | 17 |
| Table 21. HH Ownership of Appliances by Road Segment  | 17 |
| Table 22. HH Ownership of Means of Transportation by Road Segment   | 18 |
| Table 23. Gap Matrix  | 26 |
| Table 24. Entitlement Matrix  | 29 |
| Table 25. Summary of Resettlement Costs   |    |
| Table 26. Indicative Schedule of Resettlement Activities  |    |
| Table 27. Suggested Monitoring Parameters and Indicators  | 36 |
| List of Figures   |    |
| Figure 1. Location of Project-Covered Provinces   | 1  |
| Figure 2. Project Location Map of NH 22   |    |
| Figure 3. Project Location Map of NH 23   |    |
| Figure 4. Typical Cross-section of NH22 (Sakon Nakhon-Nakhon Phanom)  |    |
| Figure 5. Typical Cross-section of NH22 (Sakon Naknon-Naknon Phanom)<br>Figure 5. Typical Cross-section of NH23 (Roi Et-Yasothon) |    |
| Figure 6: DOH Road SignFigure 6: DOH Road Sign  |    |
| rigure o: Dun kuuu sigit  | 19 |

## **Executive Summary**

- 1. The THA GMS Highway Expansion Phase 2 Project will involve the expansion of NH22 and NH23 road sections from their present single 2-lane carriageways to 4-lane carriageways with a median. Financing of the upgrading of NH22 and NH23 is being considered under the Greater Mekong Sub-region (GMS) Highway Expansion Project. The Department of Highways (DOH) of the Ministry of Transport (MOT) is the Executing Agency.
- 2. The project spans about 125 km traversing the four provinces of Sakon Nakhon, Nakhon, Phanom, Roi Et, and Yasothon of northeastern Thailand covering 10 districts, 29 sub-districts, and 64 villages. NH22 is longer with about 70 km than NH23 at 55 km.
- 3. **Scope of Resettlement Impacts.** A total of 155 households will be affected by the project. Of the 155 AHs, 92 paddy field farmers utilizing 60,096 sqm along the ROW and 63 shop owners were documented. Severity was noted on 11 paddy field farmers. Around 49 AHs were deemed vulnerable, largely because of households being headed by the elderly, females, and disabled. Only 1 AH is classified as poor.
- 4. **Legal and Policy Framework.** The legal and policy framework for involuntary resettlement and customary communities is defined by relevant laws and regulations of the Government of Thailand and the ADB; Safeguard Policy Statement (SPS) (2009). The objectives of the Project resettlement policy are to avoid, if not minimize involuntary resettlement and customary communities' impacts, restore livelihoods, and improve the living standards of the vulnerable households.
- 5. **Project Entitlements.** Assistance will be provided in kind by DOH especially for relocating business stalls. As regards vulnerability and severity, these will be addressed by the project by linking with existing local government initiatives on livelihood and social development like the One Tambon One Product. An entitlement matrix has been prepared, and extension of assistance commensurate to losses prepared.
- 6. **Participation, Disclosure, and Grievance Redress.** Meaningful consultations were conducted with affected communities and the AHs therein and future consultations will be held across the project stages. Disclosure mechanisms have been defined and a draft project information crafted. A grievance redress mechanism has been prepared anchored on existing Thai laws and requisites of ADB SPS (2009). The RP will be disclosed to the affected communities within the 2<sup>nd</sup> quarter of 2017. A Project Information Booklet in both English and Thai has been prepared.
- 7. **Social Safeguards Policy Principles for the Project**. The Project shall, under the aegis of DOH, uphold legal provisions of the Government of Thailand in harmony with ADB SPS (2009) requirements. The resettlement principles for the Project are as follows:
  - (i) No site clearing inside the ROW along road sections where there are AHs until and after the RP has been updated and approved both by the DOH and the ADB, and until and after all entitlements/assistance due to the APs as mandated by this resettlement policy have been given.
  - (ii) Shops owners will be assisted in gradually dismantling and setting up their shops in a new location outside the ROW to be identified by them and agreed by both parties, in a way that will allow them to gradually phase out their operation in their old place and gradually begin their operation in their new place. Under this arrangement, the

- shop owners, whose business caters to road users, will not experience any stoppage in their operation, thereby averting severe impact on the APs' livelihood.
- (iii) Farmers presently tilling plots alongside the ROW will be provided at least 3 months advance notice to harvest their crops before the start of civil works in a particular segment of the project road.
- (iv) AHs will be fully consulted and given the opportunity to participate in matters that will have adverse impacts on their lives during the design, updating and implementation of the RP.
- (v) Any temporary impacts on land and communal infrastructure outside the ROW during construction will be restored.
- (vi) There shall be effective mechanisms for hearing and resolving grievances during the planning, updating and implementation of the RP.
- (vii) Existing cultural and religious practices shall be respected and, to the extent possible, preserved.
- (viii) Special measures will be incorporated in the RP to protect socially and economically vulnerable groups who face greater risk of further hardship, such as ethnic minorities, households headed by women and/or the disabled, landless households, children and elderly people without support structures, and people living in poverty. Appropriate assistance will be provided to help AHs belonging to any of these vulnerable groups improve their socio-economic status.
- (ix) Adequate resources will be identified and committed during the preparation of the RP that includes adequate budgetary support to be made available to cover resettlement costs within the agreed implementation period of the Project; and, adequate human resources for supervision, liaison and monitoring of resettlement and rehabilitation activities.
- (x) Appropriate reporting, monitoring and evaluation mechanisms will be identified and set in place as part of the resettlement management system.
- (xi) The RP or its summary will be translated in Thai and placed in sub-district and village offices for the information of AHs as well as other interested groups.
- (xii) Civil works contractors will not commence for any section or segment of the Project route until a) the provision of in-kind assistance for AHs within that segment has been completed satisfactorily; b) agreed rehabilitation measures are in place; and c) the area is free from all encumbrances. The schedule of the start of civil works in any section or segment of the Project route will be coordinated and planned with the participation of the resettlement and grievance redress working groups whose members include the village head and unit members, together with representatives from the sub-district DOH, the civil works contractor, relevant local government, and the AHs.
- 8. Should unanticipated involuntary resettlement impacts transpire during project implementation, DOH shall ensure the conduct of a social assessment and update or formulate a new RP depending on the extent of the impacts. Unanticipated impacts will be documented and mitigated based on the principles provided in this RP. DOH shall submit these documents to ADB for disclosure on ADB's website and convey relevant information in them to the affected communities.
- 9. **RP Budget.** Costs related to social safeguards will be financed by DOH through budget coursed to the contractor package. Sufficient budget for implementation of resettlement activities in an appropriate and timely manner will be provided. The overall cost is **THB 294,840.00** or **US\$ 8,479.69**.

10. **Implementation Arrangements.** DOH is the Executing Agency of this project, responsible for overall coordination, policy directions, and administration, including those related to social safeguards through the CSC resettlement specialist. A Resettlement Grievance Redress Working Group (RGRWG) shall be established to interphase RP implementation with local communities. The indicative schedule of the various interrelated activities in relation to the preparation and implementation of this RP is shown below.

| Activities  | Schedule                      |
|---|-------------------------------|
| Preparation of Draft RP                                 | June 2017                     |
| Distribution of Project information leaflet             | June 2017 onward              |
| DOH concurrence of draft RP; ADB approval of draft RP   | June 2017                     |
| RP updating   | 3 <sup>rd</sup> Quarter 2017  |
| Submission to and ADB concurrence of updated RP         | 3 <sup>rd</sup> Quarter 2017  |
| Set up RGRWG  | 4th Quarter 2017              |
| Provision of assistance to AHs                          | Before commencement of civil  |
| Implementation of Livelihood Assistance Support Program | works                         |
| Internal monitoring (submission of semi-annual reports) | Ongoing during implementation |

11. **Monitoring.** DOH will monitor all activities associated with involuntary resettlement. Specifically, the districts will generate the data for the DOH with guidance from the resettlement specialist under the Construction Supervision Consultants (CSC) who shall consolidate and prepare the report for PMU. Potential monitoring indicators are provided. Monitoring reports are subject to review by ADB and posted on the ADB and DOH websites for disclosure purposes.

# I. Project Description

## A. Overall Project Description

12. The Government of the Kingdom of Thailand is requesting the Asian Development Bank (ADB) to help finance the upgrading of sections of two National Highways traversing the northeastern provinces of Sakon Nakhon, Nakhon Phanom, Roi Et, and Yasothon (Figure 1). On 19 October 2016, the Thai Cabinet approved improvement on National Highway 22 (NH22) from Nong Han to Phang Kon and Sakon Nakhon to Nakhon Phanom, and NH23 from Roi Et to Yasothon. The highways are within the Greater Mekong Sub-region (GMS) GMS East-West Economic Corridor (EWEC).

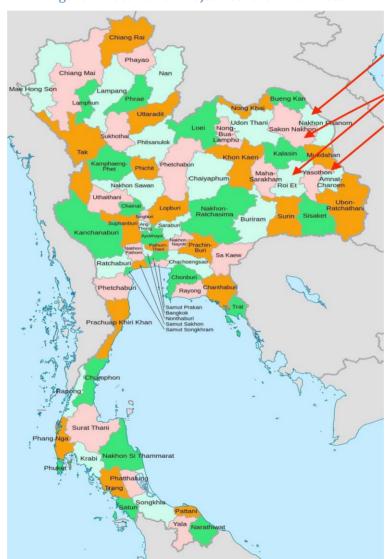


Figure 1. Location of Project-Covered Provinces

13. The project will involve the expansion of the aforementioned road sections from their present single 2-lane carriageways to 4-lane carriageways with a median. Financing of the upgrading of NH22 and NH23 is being considered under the Greater Mekong Sub-region (GMS)

Highway Expansion Project. The Department of Highways (DOH) of the Ministry of Transport (MOT) is the Executing Agency.

- 14. NH 22 traverses parts of Sakon Nakhon Province and Nakhon Phanom Province and NH23 connects Roi Et Province with Yasothon Province (Figure 2). Upgrading from a 2-lane road to a 4-lane road is in line with Thailand's Eleventh National Economic and Social Development Plan, 2012-2016. Specific to NH22, the road ends at the Thai border in Nakhon Phanom Province where the Third Mekong International Bridge links Thailand with Tha Kaek District of Khammouane Province, Lao PDR. NH22 and the Nakhon Phanom Border are used as the main freight transportation route between Thailand and Guangxi Zhuang Autonomous Region, People's Republic of China (PRC) via Lao PDR and Viet Nam. Thai trucks are allowed to enter into Lao PDR based on a bilateral Cross-Border Transport Agreement. Freights are transshipped to Vietnamese trucks at the border between Lao PDR and Viet Nam. With regard to NH23, the road ends at Ubon Ratchathani Province that also shares a border with Lao PDR. The Government plans to modernize the border facilities at Chong Mek and NH23 is expected to be an important part of the international freight transportation route between Thailand, Lao PDR, and Viet Nam. Figure 3 shows the project location of NH23.
- 15. This resettlement plan (RP) contains the measures to be carried out by DOH to avoid and/or minimize impacts on the affected people and households (APs/AHs), particularly on their sources of livelihood, and for the purpose of improving or at least restoring their standards of living consistent with National Thai laws and ADB Safeguards Policy Statement (SPS) (2009).

#### B. Civil Works to Be Undertaken

- 16. **National Highway 22**. There are two sections in NH22 that will be widened to four lanes. Section 1 from Nong Han to Phang Kon (about 37 km) is under the administrative jurisdiction of Sakon Nakhon Highway District 2 while Section 2 from Sakon Nakhon to Nakhon Phanom (about 33 km) is under the jurisdiction of Sakon Nakhon Highway District 1 and Nakhon Phanom District.
- 17. NH22 has a right-of-way (ROW) of 60 meters that was acquired through a Royal Decree in 1967. All proposed improvement works in NH22 will be done within the existing 60 meter wide ROW. Improvement of NH22 will involve the widening of the existing roadway sections from two lanes to four lanes by constructing an additional one lane with side drains on each side of the road. The proposed central median will be elevated in high population density areas and depressed in low density areas. The additional lanes will be constructed on a 2.5m high embankment to align with the height of the existing 2 lane road.
- 18. Nong Han to Phang Kon. The Nong Han to Phang Kon section is located along Asian Highway 15 in northeastern Thailand that links the provinces of Sakon Nahon and Udon Thani. The road section traverses the sub-districts of Sawang Daen Din and Pungkon, in addition to the villages of Bong Tai, Ban Tai, Sawang Daen, Tat That Tong, Waeng, Muang Kai, and Pung Kon. Road widening works will be at three sections, i.e. (i) 60+000 to 72+600, (ii) 83+098 to 94+748, and (iii) 100+248 to 116+048. Road surface will be asphaltic concrete. Drainage crossings within the roadway include some 28 30 drainage canals and small creeks that require the installation of culverts or construction of small bridges.

แผนที่สังเขปแสดงระยะทางควบคุม แขวงทางหลวงสกลนครที่ 2 (สว่างแดนดิน) สำนักงานทางหลวงที่ 3 (สกลนคร) 1121 47 ไป อ.บ้านม่วง และระกรสหารถึงกาฬ רחופו. פ עוד ไป อ.บ้านตุง 😞 ไป อ.คำตากล้า ไป อ.บ้านดุง 63+644 42+000 D LL MILESUES 21+678 (noviminari แขวงการทางสกลนครที่ 2 (สวางแตนดิน) แขวงการทางสถุนเคร ที่ 2 (สวางเตนติน) สวากเพาะดิน เหรียกัน แขวงการทางสกลนคร ที่ 2 (สวางแดนดิน) 34+476(2004) 33+212(2177) เขาในเดียนไ. วานวร์ราส 17+485 เขตพลตัว Z อ.วานรนีวาส =(3127) = ไป อ. ศรีสงคราม สำนักบ้ารุงทางที่ 2 (อุดรธานี) อ.อากาศอำนวย แขวงการทวงนครหนม ไป อ.บ้านตุง 2270 7+750 3+440 เขตพาต์าเกต 🗇 อ.นาหวา 800 7+563 manuscription and middle 15+550 symminum •5 อ.สวางแตนดีน อ.สวางแตนดีน เขางการทางสกลนครที่ 2 (สวางแตนต็น) แขวงการทางสกลนครที่ 2 (สวางเดนดีน) 6+085 commissions 3 สำนักบ้ารุงทางที่ 2 อ.ฟังโคน (ละระกรี) univelte. บ.มวง โป 11+100 เทพพอตัวเกล หมวงกาวทางทั้งโอน สวรแทนสีน.ผ่อเพรา 8. วารีชภูมี 227 เดเมเนรียววง ไป จ.อุดรธานี 🚐 อ.พรรณานิคม Lengtherman and Length (สกลนคว) 9 19+213 บ.คำอใต้ แขวงการทางสกลนคร เขือนหว้าอุน 56+050 เพพาะส่วนาย 16+600 เขตต่อตำนาด กรายเลย 137-753(22) เมรางการทางสุดสมมาร์ ที่ 2 (สวางแตนสัน) มาราคการทางสุดสมมาร์ ที่ 2 (สวางแตนสัน) ศ 2 (สวางแตนตีน)

สน.บท.จุดรธานีที่ 2

หมวดทางหลวง

อำเภอ

หมู่บ้าน

(0)

0

แขวงการทางสกลนครที่ 2 (สว่างแดนดิน)

ไป อี.วังสามหมอ

หมาตการหมาตบาก (สกลนคร) จ.สกลนคว

อ.ภพาน

ผิวทาง AC. **Дэиз** Сопе.

ผิวทาง SST.

213

อ.กุตบาก

ไป อ.สมเด็จ

แขวงการทางสกลนคร ที 2 (สวางแตนดีน)

เขือน

แม่น้ำ

หมายเลขทางหลวง

Figure 2. Project Location Map of NH 22

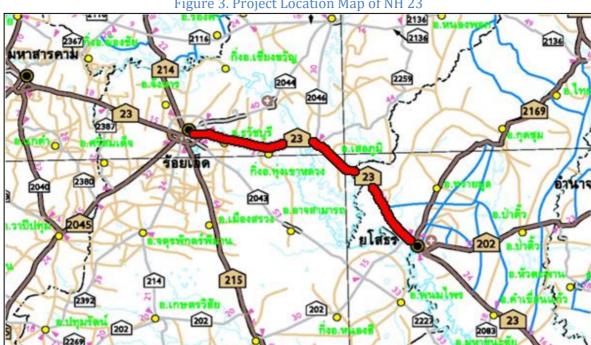


Figure 3. Project Location Map of NH 23

- Sakon Nakhon to Nakhon Phanom. The second section from Sakon Nakhon to Nakhon 19. Phanom district covers the sub-districts of Kusuman and Pla Pak. This section that will be widened is about 20km away from the Nakhon Phanom Friendship Bridge at the Thailand-Lao PDR border. An additional one lane will be constructed on both sides of the existing road, except at the beginning in Kusuman subdistrict where two new lanes will be on the left side of the existing carriageway. The proposed road will be backfilled to about 1.5 meter-high to align with the current elevation of the existing road. The proposed roadway will include side drains in addition to a central median that is either depressed or elevated to replace the current painted median. Figure 4 shows a typical cross section designed for NH22.
- 20. National Highway 23. NH23 is at the south of the GMS East-West Economic Corridor (EWEC), as shown in Figure 3 above. The road section for upgrading traverses the districts of Roi Et and Yasothon and the sub-districts of Selaphon and Ard Samat. The road ROW is 60m. acquired through a Royal Decree in 1968. Road improvement for NH23 will involve the following: (i) construction on approximately 1.2m high embankment two lanes to the right of the present 2 lane road; (ii) widening of existing bridges across Chi River and Young River and other small drainage crossings; (iii) provision of a 10m wide depressed central median; (iv) provision of about 1m wide side drains on both sides of the 4-lane road section; and (v) surfacing of the road with asphalt concrete payement. Road sections within town centers have four lanes already and are not included in the road upgrading project. Figure 5 shows a typical cross section designed for NH 23.

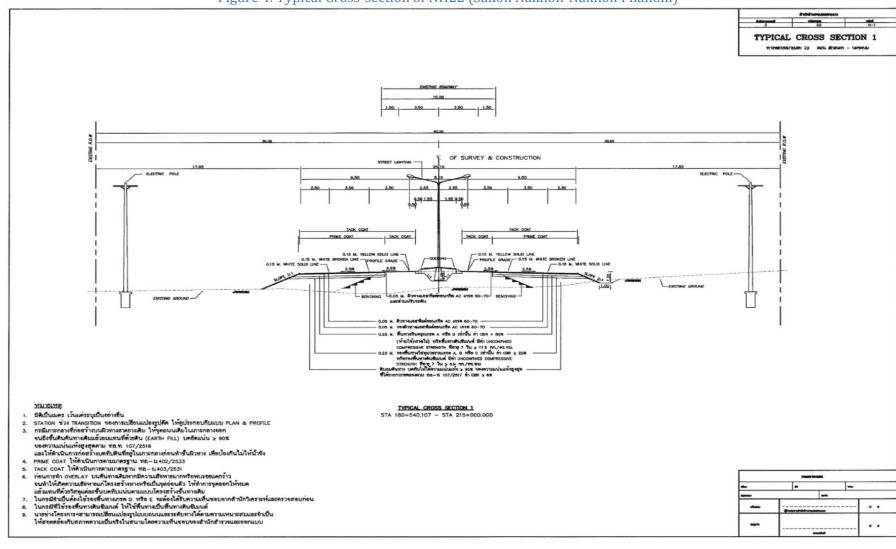
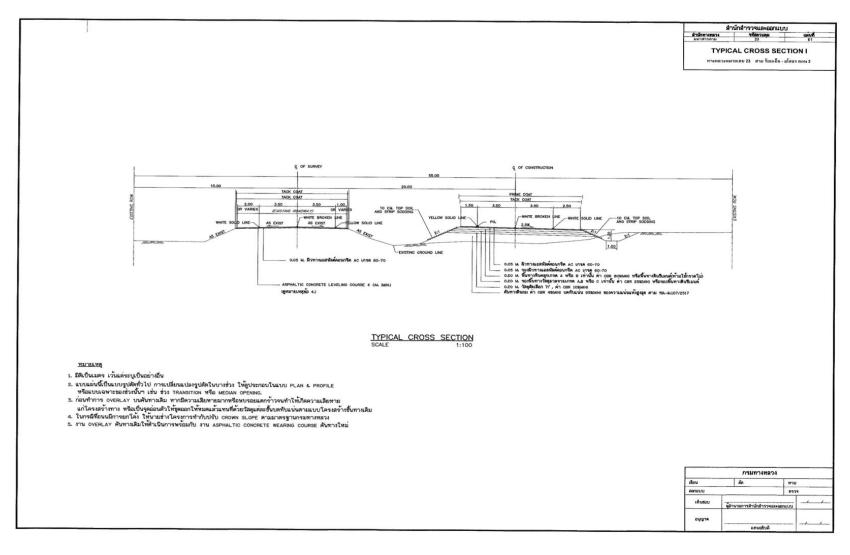


Figure 4. Typical Cross-section of NH22 (Sakon Nakhon-Nakhon Phanom)

Figure 5. Typical Cross-section of NH23 (Roi Et-Yasothon)



#### **C.** Measures to Minimize Impacts

- 21. Since a number of the affected structures are shops, emphasis is given to ensure that shop owners will not experience any stoppage in their operation, allowing them to continue with their roadside livelihood. Construction works in the 2 road sections will be done segment by segment to allow the AHs, particularly shop owners, sufficient time to find and develop relocation sites outside of the ROW and for these AHs to gradually transfer their business operations in the new sites with minimal or no stoppage of their commercial activities. Shop owners will be informed about the start of civil works in a specific section of the road at least 3 months in advance. All standing annual crops will be allowed to be harvested before the start of civil works in a particular section of the project road.
- 22. The AHs and local government officials have been advised about the cut-off date during public meetings held in March 2017. The cut-off date stipulates for AHs and other community members not to introduce new immovable structures within the ROW and/or widen and further develop structures that have already been documented during the inventory of assets in March 2017. The cut-off date coincides with the last date when the inventory was conducted in the pertinent road segments and this is documented as 08 May 2017 across sites. Further, APs will be informed in sufficient time to harvest their crops, and that there would be no further cultivation in the season prior to construction.
- 23. A Public Information Booklet (Appendix 4: English and Thai versions) will be distributed to the AHs within the 2<sup>nd</sup> quarter of 2017 that provides brief information on Project impacts, entitlements, policy on cut-off date for eligibility, and grievance redress mechanism, among others.

## **II. Scope of Resettlement Impacts**

#### A. Project Coverage

24. The project spans about 125km traversing four provinces, 10 districts, 29 subdistricts, and 64 villages. NH22 is longer with about 70 km than NH23 at about 55 km. Table 1 provides in detail, the government administrative units traversed by the two roads.

Table 1. Places Traversed by NH22 and NH23

| Province  | District    | Sub-district    | Village Chainage  |        |        |  |  |  |
|---|-------------|-----------------|-------------------|--------|--------|--|--|--|
|   |             | NH2             | 22                |        |        |  |  |  |
| a. HW22 Phang Khone to Sawang Daen Din (37 km; (i) 60+000 to 72+600, (ii) 83+098 to 94+748, and (iii) 100+248 to 116+048) |             |                 |                   |        |        |  |  |  |
| Sakon   | Sawang Daen | Bong Tai        | Ban Ku Chik       | 60+250 | 61+175 |  |  |  |
| Nakhon <sup>1</sup>   | Din         | Kho Tai         | Ban Nasam Boom    | 60+250 | 61+175 |  |  |  |
|   |             | Bong Tai        | Ban Chum Chai     | 64+700 | 65+150 |  |  |  |
|   |             | Nong Luang      | Ban Nong Yan Chin | 64+700 | 65+750 |  |  |  |
|   |             | Ban Tai         | Ban Tai           | 68+650 | 69+214 |  |  |  |
|   |             | Sawang Daen Din | Ban Dong Sawan    | 80+575 | 82+725 |  |  |  |
|   |             | Sai Mun         | Ban Nong Kun      | 82+725 | 84+100 |  |  |  |
|   |             |                 | Ban Sai Mun       | 84+100 | 85+825 |  |  |  |
|   |             |                 | Ban Kham Mek      | 85+825 | 87+000 |  |  |  |
|   |             | Phan Na         | Ban Ma            | 87+000 | 88+475 |  |  |  |
|   |             |                 | Ban Phan Na       | 88+475 | 90+000 |  |  |  |
|   |             |                 | Ban Muang Thong   | 90+000 | 91+300 |  |  |  |

| Province            | District           | Sub-district                                 | Village                  | Chainage |           |  |
|---------------------|--------------------|--|--------------------------|----------|-----------|--|
|                     |                    |  | Ban Man                  | 91+300   | 92+000    |  |
|                     |                    | That Thong                                   | Ban Duea                 | 92+000   | 92+800    |  |
|                     |                    | Waeng  | Ban Dong Khueang         | 92+800   | 97+890    |  |
|                     | Phang Khon         | Muang Khai                                   | Ban Pha Khao             | 98+500   | 99+250    |  |
|                     |                    |  | Ban Muang Khai           | 99+250   | 100+233   |  |
|                     |                    |  | Ban Dong                 | 100+233  | 101+050   |  |
|                     |                    |  | Ban Ang                  | 101+050  | 101+527   |  |
|                     |                    |  | Ban Muang Kam            | 101+806  | 102+500   |  |
|                     |                    |  | Ban Kham Charoen         | 102+500  | 103+800   |  |
|                     |                    | Phang Khon                                   | Ban Sang Khui            | 103+800  | 104+899   |  |
|                     | on Nakhon to Nak   | khon Phanom (33 kr                           | n; km 180+450 to 213+800 | )        |           |  |
| Sakon               | Mueang Sakon       | Tha Rae                                      | Ban Tha Rae              | 169+970  | 173+000   |  |
| Nakhon <sup>2</sup> | Nakhon             |  | Ban Nong Bua Thong       | 173+000  | 175+000   |  |
|                     | Phon Na Kaeo       | Na Kaeo                                      | Ban Thepnim It           | 175+400  | 181+000   |  |
|                     | Kusuman            | Na Pho                                       | Ban Na Pho Noi           | 181+000  | 184+000   |  |
|                     |                    |  | Ban Na Pho               | 184+000  | 186+500   |  |
|                     |                    | Kusuman                                      | Ban Kusuman              | 186+500  | 194+000   |  |
|                     |                    | Phothisan                                    | Ban Non Rung Rueang      | 194+800  | 196+400   |  |
|                     |                    |  | Ban Niramai              | 196+400  | 198+490   |  |
| Nakhon              | Mueang             | Wang Ta Mua                                  | Chok Amnuay              | 200+150  | 200+650   |  |
| Phanom <sup>3</sup> | Nakhon             |  | Non Chom Phu             | 204+400  | 205+010   |  |
|                     | Phanom             |  | Nong Saeng               | 206+650  | 207+675   |  |
|                     |                    |  | Wang Muang               | 207+675  | 208+115   |  |
|                     |                    |  | Wang Ta Mua              | 209+050  | 209+980   |  |
|                     |                    |  | Porn Charoen             | 209+050  | 209+980   |  |
|                     |                    | Kurukhu                                      | Ban Nong Ya              | 213+900  | 214+650   |  |
| Subtotals           | T = =              |  | 1                        | T        |           |  |
| 2 Provinces         | 6 Districts        | 18 Sub-districts                             | 37 Villages              | 70 km    |           |  |
| - LIM 00 Dail       | Et to Oolonboro (0 | NH   |                          |          |           |  |
|                     |                    | 6 km; 115+512 to 14                          |                          | 145.540  | 440.740   |  |
| Roi Et              | Thawat Buri        | Niwet  | Pratu Chai               | 115+512  | 116+749   |  |
|                     |                    |  | Nikom                    | 116+749  | 120+612   |  |
|                     |                    | Line Man                                     | Niwet                    | 120+612  | 125+312   |  |
|                     |                    | Um Mao                                       | Um Mao                   | 125+312  | 126+112   |  |
|                     |                    | Phaisan                                      | Fangdaeng                | 126+112  | 127+912   |  |
|                     |                    |  | Tha Bo                   | 127+912  | 128+812   |  |
|                     |                    |  | Don Wua                  | 128+812  | 129+912   |  |
|                     | Thursallhaa        | Thurs Whas                                   | Hua Bo                   | 129+912  | 131+612   |  |
|                     | Thung Khao         | Thung Khao                                   | Wai Noi                  | 131-+612 | 135+312   |  |
|                     | Luang              | Luang  | Wai Leum                 | 135+312  | 138+112   |  |
|                     | Colonbum           | Maba   | Tha Sabaeng              | 138+112  | 139+137   |  |
|                     | Selaphum           | Klang  | Tha Khai                 | 139+137  | 139+412   |  |
| h H/M 22 Cala       | unhom to Vasathar  | <br>n (29 km; 143+412 to                     | Klang (Municipal)        | 139+412  | 142+212   |  |
| Yasothon            |                    |  | ,                        | 142+212  | 142 : 442 |  |
| าสรบเทบท            | Mueang<br>Yasothon | Khwan Meaung <sup>4</sup> Khwao <sup>4</sup> | Selaphum<br>Non Yang     |          | 142+412   |  |
|                     | 1 450111011        |  | Non Yang                 | 151+762  | 153+652   |  |
|                     |                    | Doet   | Ban Mai Chumphon         | 153+552  | 157+062   |  |
|                     |                    |  | Ban Kham Daeng           | 157+062  | 159+112   |  |
|                     |                    |  | Ban Chuak                | 159+112  | 161+012   |  |
|                     |                    |  | Ban Doet                 | 161+012  | 163+832   |  |
|                     |                    | Du Thung                                     | Ban Nam Pho              | 163+832  | 164+912   |  |
|                     | 1                  | Du Thung                                     | Ban Du Thung             | 164+912  | 165+862   |  |

| Province    | District     | Sub-district     | Village Chainage |         | nage    |
|-------------|--------------|------------------|------------------|---------|---------|
|             |              |                  | Ban Kham Bon     | 165+862 | 166+742 |
|             |              |                  | Ban Nhong Sang   | 166+742 | 168+462 |
|             |              | Samran           | Ban Nong 1 Tum   | 168+462 | 170+012 |
|             |              |                  | Ban Bak          | 170+012 | 172+112 |
|             |              |                  | Ban Chiang Wang  | 172+112 | 173+312 |
|             |              |                  | Ban Samran       | 173+312 | 175+527 |
| Subtotals   |              |                  |                  |         |         |
| 2 Provinces | 4 Districts  | 11 Sub-Districts | 27 Villages      | 55 km   |         |
| TOTALS      |              |                  |                  |         |         |
| 4 Provinces | 10 Districts | 29 Sub-Districts | 64 Villages      | 125 km  |         |

NOTE: 1 Under the administrative jurisdiction of DOH Sakon Nakhon 2 District Office (Sawag Daen Din)

#### **B. Data Sources**

25. The Inventory of Loss (IOL) and Socioeconomic Survey (SES) were conducted in March 2017 by staff of the DOH District offices after a series of consultations along the road segments (see chapter on consultations for details) had been held. A revalidation of the IOL and SES was done from 6-8 May 2017. The DOH road alignment was used as basis to determine APs who utilize areas along the ROW despite DOH signages advising the public not to encroach on the ROW. Survey instruments were provided by the specialists to determine the level of AP usage of the then residual areas of the ROW. Detailed socioeconomic information on AHs to generate information on affected assets, income and relocation options for shops, as well as basic information on the household head, such as gender, age, educational attainment, and primary source of income. Dummy tables used as guide during the IOL and SES are provided in Appendix 1.

#### C. Project Impacts and Affected Households

26. Table 2 shows the extent of usage of areas along the ROW of project sites. All in all, a total of 155 households have been found to be generating livelihood activities alongside the project ROW. Appendix 2 provides the detailed documentation of impacts.

Table 2. Scope of Project Impacts

|  | S     | hops     | Pac   | Total of   |       |
|--|-------|----------|-------|------------|-------|
| Road / Segment                                   | No of | Affected | No of | Affected   | AHs   |
|  | AHs   | Area     | AHs   | Area       | Al 15 |
| NH22   | 42    | 3,373.82 | 0     | -          | 42    |
| HW22 Phang Khone to Sawang Dan Din (36.58        | 30    | 2,896.82 | 0     | -          | 30    |
| km; (i) 60+000 to 72+600, (ii) 83+098 to 94+748, |       |          |       |            |       |
| and (iii) 100+248 to 116+048)                    |       |          |       |            |       |
| HW22 Sakon Nakhon to Nakhon Phanom               | 12    | 477.00   | 0     | -          | 12    |
| (33.26km; km 180+450 to 213+800)                 |       |          |       |            |       |
| NH23   | 21    | 1,968.00 | 92    | 164,760.00 | 113   |
| HW 23 Roi Et to Selaphom (25.657 km;             | 13    | 531.00   | 36    | 17,040.00  | 49    |
| 115+512 to 141+169)                              |       |          |       |            |       |
| HW 23 Selaphom to Yasothon (29.4 km;             | 8     | 1,437.00 | 56    | 43,056.00  | 64    |
| 143+412 to 172+812)                              |       |          |       |            |       |
| TOTALS   | 63    | 5,341.82 | 92    | 60,096.00  | 155   |

<sup>&</sup>lt;sup>2</sup> Under the administrative jurisdiction of DOH Sakon Nakhon 1 District Office (Kusuman)

<sup>&</sup>lt;sup>3</sup> Under the administrative jurisdiction of DOH Nakhon Phanom District Office (Pla Pak)

<sup>&</sup>lt;sup>4</sup> Under the administrative jurisdiction of Yasothon DOH District Office (At Samat)

- 27. **Loss of Agricultural Lands and Crops.** Paddy farms amounting to 60,096.00 sqm are tended by 92 households, mostly for home consumption. Normally, former owners continue using the land for paddy cultivation as an extension of their adjacent paddy field. They are however aware of the ROW and express their willingness to stop using the area as soon as DoH requires the land this despite the signages where DOH stakes its claim to the ROW. Rice production within affected areas amounts to around 7,078.68 kg per cropping, estimated at about THB 74,326.14 for the 92 AHs.
- 28. **Loss of Shops: Structures and Business.** A total of 63 affected households (AH) operate shops that line the ROW with an estimated total area of 5,341.82 sqm. These shops mostly sell food items and handicrafts to travelers. The shops are mostly made of light materials like wooden poles with corrugated roofing. Others are even made of canvass and thatched materials for roof.
- 29. Shop owners generally occupy areas along the ROW mostly on a temporary basis depending on seasonality of crops like watermelon and other crops. These stall owners reside far from the roads and have shops made of temporary structures that mostly are left to the elements after a season. Food shop owners mostly have titled residential areas alongside the ROW but have relatively mobile shops that are assembled wherever there are greater opportunities for business. These shop owners simply sidle back in front of their places of residence depending on conditions that favor them.

Table 3. Types of Affected Shops by Road Segment

| Table 5. Types of Affected Shops by Road Segment |       |          |          |         |           |       |  |  |
|--|-------|----------|----------|---------|-----------|-------|--|--|
|  |       |          | pe of Bu |         |           |       |  |  |
| Road / Segment                                   | Food  | Agri     | Handi-   | General | Combined; | TOTAL |  |  |
|  | Items | Products | crafts   | Trading | Others    |       |  |  |
| NH22   | 15    | 5        | 11       | 6       | 5         | 42    |  |  |
| HW22 Phang Khone to Sawang Dan Din               | 7     | 4        | 11       | 4       | 4         | 30    |  |  |
| (36.58 km; (i) 60+000 to 72+600, (ii) 83+098     |       |          |          |         |           |       |  |  |
| to 94+748, and (iii) 100+248 to 116+048)         |       |          |          |         |           |       |  |  |
| HW22 Sakon Nakhon to Nakhon Phanom               | 8     | 1        | 0        | 2       | 1         | 11    |  |  |
| (33.26km; km 180+450 to 213+800)                 |       |          |          |         |           |       |  |  |
| NH3  | 19    | 0        | 1        | 0       | 1         | 21    |  |  |
| HW 23 Roi Et to Selaphom (25.657 km;             | 11    | 0        | 1`       | 0       | 1         | 14    |  |  |
| 115+512 to 141+169)                              |       |          |          |         |           |       |  |  |
| HW 23 Selaphom to Yasothon (29.4 km;             | 8     | 0        | 0        | 0       | 0         | 8     |  |  |
| 143+412 to 172+812)                              |       |          |          |         |           |       |  |  |
| TOTALS   | 34    | 5        | 12       | 6       | 6         | 63    |  |  |

Table 4. Materials of Affected Shops by Road Segment

| Road / Segment   |    | Struct | TOTAL |   |   |       |
|--|----|--------|-------|---|---|-------|
|  |    | В      | С     | D | Е | TOTAL |
| NH22   | 32 | 3      | 0     | 7 | 0 | 42    |
| HW22 Phang Khone to Sawang Dan Din (36.58 km;          | 29 | 0      | 0     | 1 | 0 | 30    |
| (i) 60+000 to 72+600, (ii) 83+098 to 94+748, and (iii) |    |        |       |   |   |       |
| 100+248 to 116+048)                                    |    |        |       |   |   |       |
| HW22 Sakon Nakhon to Nakhon Phanom (33.26km;           | 3  | 3      | 0     | 6 | 0 | 12    |
| km 180+450 to 213+800)                                 |    |        |       |   |   |       |
| NH3  | 11 | 3      | 2     | 4 | 1 | 21    |
| HW 23 Roi Et to Selaphom (25.657 km; 115+512 to        | 4  | 2      | 2     | 4 | 1 | 13    |
| 141+169)   |    |        |       |   |   |       |

| Road / Segment                                  |    | Structi | TOTAL |    |   |       |
|---|----|---------|-------|----|---|-------|
|   |    | В       | С     | D  | Е | IOTAL |
| HW 23 Selaphom to Yasothon (29.4 km; 143+412 to | 7  | 1       | 0     | 0  | 0 | 8     |
| 172+812)  |    |         |       |    |   |       |
| TOTALS  | 43 | 6       | 2     | 11 | 1 | 63    |

Legend: A = Wooden pole, corrugated roof

B = Wooden pole, thatched/canvass roof

C = Metal/concrete pole, thatched roof

D = Metal/concrete pole, corrugated roof

E = Tent

- 30. **Temporary Losses.** Temporary impacts will be inevitable during construction but the details have not been determined to date. At this stage, it is envisaged that areas owned by DOH outside the ROW will be utilized for construction operations, i.e., workers' camps. Once the details are provided, and should impacts be deemed significant, an updated RP will be prepared following detailed engineering design and social assessment. Temporary impacts shall be avoided during construction, if not minimized.
- 31. **Vulnerability and Severity.** About 49 AHs have been determined to be vulnerable, meaning these households may have any or more of the following attributes: (i) headed by females, (ii) headed by elderly persons, (iii) headed by persons with disabilities, and/or (iv) considered poor with reference to the latest Basic Minimum Needs Information (2016) housed at the Districts. Table 5 provides the summaries and Appendix 2 the details. The table shows that AHs may have more than 1 facet of vulnerability, i.e. a poor female-headed household. Age or being elderly is the most pervasive determinant of vulnerability in the project sites at 64%, followed by female headed households (18%), disable-headed (2%) and poor household the least at 1%. For the 49 AHs, the total affected persons amount to 198.

Table 5. Vulnerable AHs

| Location        | No. of<br>APs | Female HH | Elderly | Disabled | Poor HH | Total Vulnerable<br>AHs |
|-----------------|---------------|-----------|---------|----------|---------|-------------------------|
| Sakon Nakhon    | 28            | 4         | 5       | 3        | 0       | 7                       |
| Sakon Nakhon II | 23            | 3         | 4       | 3        | 0       | 6                       |
| Sakon Nakhon I  | 5             | 1         | 1       | 0        | 0       | 1                       |
| Roi Et          | 23            | 0         | 5       | 1        | 0       | 6                       |
| Yasathon        | 147           | 14        | 31      | 0        | 1       | 36                      |
| TOTALS          | 198           | 18        | 41      | 4        | 1       | 49                      |

32. Of the 155 AHs, 11 are deemed severe computed at 10% or more of all affected productive assets, with or without proof of ownership per ADB SPS 2009. Market price was used to valuate assets like land. Only 2 AHs are found in Roi Et and 9 from Yasothon. Severity ranges from 10% to 18%. Appendix 2 provides the details. Only paddy farmers were computed for severity - shop owners are not considered in this category as the dismantling and transfer to another location proximal to their current location is estimated to take only 2 hours and they are able to resume income generating activities.

Table 6. Severity of Impact on AHs

|            |          |            |               | Productive As     | sets              |                         |          |
|------------|----------|------------|---------------|-------------------|-------------------|-------------------------|----------|
| Location   | AH<br>No | L          | ₋and          | Value of Other    | Total Value of    | Total Value of Affected | Severity |
|            | 110      | Area (sqm) | Value         | Productive Assets | Productive Assets | Productive Assets       |          |
| Roi Et     | 2        | 10,400.00  | 10,400,000.00 | 390,004.25        | 10,790,004.25     | 1,202,504.25            | 11.10%   |
|            | 1        | 5,800.00   | 5,800,000.00  | 231,252.13        | 6,031,252.13      | 601,252.13              | 10.0%    |
|            | 2        | 4,600.00   | 4,600,000.00  | 158,752.13        | 4,758,752.13      | 601,252.13              | 12.6%    |
| Yasothon   | 9        | 58,160     | 58,160,000.00 | 2,236,481.03      | 60,396,481.03     | 8,778,281.03            | 14.50%   |
|            | 1        | 4,480      | 4,480,000.00  | 203,001.70        | 4,683,001.70      | 481,001.70              | 10.3%    |
|            | 2        | 4,380      | 4,380,000.00  | 184,001.70        | 4,564,001.70      | 481,001.70              | 10.5%    |
|            | 3        | 4,280      | 4,280,000.00  | 152,001.70        | 4,432,001.70      | 481,001.70              | 10.9%    |
|            | 4        | 9,200      | 9,200,000.00  | 332,504.25        | 9,532,504.25      | 1,202,504.25            | 12.6%    |
|            | 5        | 6,160      | 6,160,000.00  | 158,003.40        | 6,318,003.40      | 962,003.40              | 15.2%    |
|            | 6        | 6,160      | 6,160,000.00  | 72,203.40         | 6,232,203.40      | 962,003.40              | 15.4%    |
|            | 7        | 7,200      | 7,200,000.00  | 459,504.25        | 7,659,504.25      | 1,202,504.25            | 15.7%    |
|            | 8        | 3,300      | 3,300,000.00  | 281,252.13        | 3,581,252.13      | 601,252.13              | 16.8%    |
|            | 9        | 13,000     | 13,000,000.00 | 394,008.50        | 13,394,008.50     | 2,405,008.50            | 18.0%    |
| Totals/Ave | 11       | 68,560.00  | 68,560,000.00 | 2,626,485.28      | 71,186,485.28     | 9,980,785.28            | 14.00%   |

# D. Summary of Resettlement Impacts

33. Table 7 provides a rundown of the affected assets of AHs and other adverse social impacts of the proposed Project.

Table 7. Summary of Impacts

| Items                                   | Unit           | Total     |
|---|----------------|-----------|
| Land                                    |                |           |
| Rice paddies                            | m <sup>2</sup> | 60,096.00 |
| Structures                              |                |           |
| Shops                                   | m <sup>2</sup> | 5,341.82  |
| Total Number of Affected Households     |                | 155       |
| Shop owners                             | no.            | 63        |
| Paddy farmers                           | no.            | 92        |
| Losing 10% or more of productive assets | no.            | 11        |
| Vulnerable households                   |                | 49        |
| Female-headed household                 | no.            | 18        |
| Household head with disability          | no.            | 4         |
| Household below the poverty line        | no.            | 1         |
| Elderly household heads                 | no.            | 41        |

## III. Socioeconomic Information and Profile

## A. The Project Area

34. The four provinces traversed by the two roads are: Sakon Nakhon, Nakhon Phanom, Roi Et, and Yasothon. **Sakon Nakhon** is one of the northeastern provinces of Thailand with a total land area of 9,605.8 km² and population of 1,138,609 in 2014. Its neighboring provinces are Nong Khai, Bueng Kan, Nakhon Phanom, Mukdahan, Kalasin, and Udon

Thani. The province is not far from the Mekong River. The province is divided into 18 districts, further subdivided into 125 communes and 1,323 villages.

- 35. **Nakhon Phanom** province is bordered by the following provinces: Mukdahan, Sakon Nakhon, and Bueng Kan, and across the Mekong River, the province of Khammouan of Lao PDR. The provincial total land area is 5,512.7km² with 2014 population of 713,341. The province is subdivided into 12 districts. The districts are further subdivided into 97 subdistricts and 1,040 villages.
- 36. **Roi Et** province has a total land area of 8,299.4km² and 2014 population of 1,308,318. It is bounded by the provinces of Kalasin, Mukdahan, Yasathon, Sisaket, Surin, and Maha Sarakham. Roi Et province is subdivided into 20 districts and further subdivided into 193 subdistricts and 2,311 villages.
- 37. **Yasothon** is a province also in the northeast situated along the Chi River. Neighboring provinces are Mukdahan, Amnat Charoen, Ubon Ratchatthani, Sisaket, and Roi Et. The province is divided into nine districts, further subdivided into 78 communes and 835 villages. Total land area is 4,161.7km² with population count of 540,211 in 2014.

## B. Results of the Socioeconomic Survey on Affected Households

- 38. The IOL identified a number of shops alongside the ROW that impinge on ROW integrity, in addition to a number of paddy farms despite DOH signages advising the public not to encroach on the ROWDOH. The following sections present the findings of the SES of affected households (AH) along the ROW that total 155 households (HH). Table 8 shows that most (41%) of the AHs come from Yasathon, followed by Roi Et at 32% and the least being Nakhon Phanom (1%).
- 39. **Sociodemographic Characteristics.** Based on age brackets, AH heads are clustered at the 41-50 and 51-60 at 32% each. Mean age is 51.8 years. There are more male AH heads at 55% over female headed AHs though limitations are noted at reporting those interviewed to be HH heads, later verified with other HH characteristics.

Table 8. Age and Gender of AH Heads by Road Segment

| Location        |            |       |       | Age   |       |    |       |      | Gender |      | Percent |
|-----------------|------------|-------|-------|-------|-------|----|-------|------|--------|------|---------|
| Location        | 30 & below | 31-40 | 41-50 | 51-60 | 61 up | NR | Total | Male | Female | Both |         |
| Sakon Nakhon    | 2          | 3     | 17    | 11    | 5     | 2  | 40    | 16   | 24     | 40   | 26%     |
| Sakon Nakhon II | 1          | 2     | 14    | 7     | 4     | 2  | 30    | 14   | 16     | 30   |         |
| Sakon Nakhon I  | 1          | 1     | 3     | 4     | 1     | 0  | 10    | 2    | 8      | 10   |         |
| Nakhon Phanom   | 0          | 1     | 0     | 1     | 0     | 0  | 2     | 0    | 2      | 2    | 1%      |
| Roi Et          | 1          | 5     | 18    | 22    | 3     | 0  | 49    | 37   | 12     | 49   | 32%     |
| Yasathon        | 0          | 2     | 14    | 16    | 29    | 3  | 64    | 33   | 31     | 64   | 41%     |
| TOTAL           | 3          | 11    | 49    | 50    | 37    | 5  | 155   | 86   | 69     | 155  | 100%    |
| Percent         | 2%         | 7%    | 32%   | 32%   | 24%   | 3% | 100%  | 55%  | 45%    | 100% |         |

40. A large majority of AH heads are married at 82% and 11% widowed. Mean household size is 4.1 and clustered at the 4-6 bracket with 61%. Range of AH size is 1 member being lowest and the largest is 12 members.

Table 9. Civil Status of HH Heads and HH Size by Road Segment

| Location        |         |        | Ci      | vil Status |            |       | HH Size |     |     |       |    |       |
|-----------------|---------|--------|---------|------------|------------|-------|---------|-----|-----|-------|----|-------|
| Location        | Married | Single | Widowed | Divorced   | Common Law | Total | 1-3     | 4-6 | 7-9 | 10 up | NR | Total |
| Sakon Nakhon    | 32      | 1      | 3       | 2          | 2          | 40    | 13      | 26  | 1   | 0     | 0  | 40    |
| Sakon Nakhon II | 24      | 1      | 2       | 1          | 2          | 30    | 9       | 20  | 1   | 0     | 0  | 30    |
| Sakon Nakhon I  | 8       | 0      | 1       | 1          | 0          | 10    | 4       | 6   | 0   | 0     | 0  | 10    |
| Nakhon Phanom   | 2       | 0      | 0       | 0          | 0          | 2     | 0       | 2   | 0   | 0     | 0  | 2     |
| Roi Et          | 48      | 1      | 0       | 0          | 0          | 49    | 13      | 33  | 3   | 0     | 0  | 49    |
| Yasathon        | 45      | 4      | 14      | 0          | 1          | 64    | 24      | 34  | 2   | 3     | 1  | 64    |
| TOTAL           | 127     | 6      | 17      | 2          | 3          | 155   | 50      | 95  | 6   | 3     | 1  | 155   |
| Percent         | 82%     | 4%     | 11%     | 1%         | 2%         | 100%  | 32%     | 61% | 4%  | 2%    | 1% | 100%  |

41. Of the 155 AH heads, 77 or 50% reached P1-P6 or primary levels of schooling. Around 14% each got to secondary and high school levels, and 8% each attained university and vocational education. In terms of disability, 3% or 4 AH heads are disabled.

Table 10. Educational Attainment and Physical Condition of HH Heads by Road Segment

|                 | Educational Attainment Physical Condition |       |       |               |            |             |       |                    |          |             |       |  |  |
|-----------------|---|-------|-------|---------------|------------|-------------|-------|--------------------|----------|-------------|-------|--|--|
|                 |   |       | Edi   | ucational Att | ainment    |             |       | Physical Condition |          |             |       |  |  |
| Location        | P1-P6                                     | M1-M3 | M4-M6 | Vocational    | University | No response | Total | Normal             | Disabled | No response | Total |  |  |
| Sakon Nakhon    | 22  | 5     | 6     | 4             | 2          | 1           | 40    | 36                 | 3        | 1           | 40    |  |  |
| Sakon Nakhon II | 17  | 5     | 4     | 2             | 1          | 1           | 30    | 26                 | 3        | 1           | 30    |  |  |
| Sakon Nakhon I  | 5   | 0     | 2     | 2             | 1          | 0           | 10    | 10                 | 0        | 0           | 10    |  |  |
| Nakhon Phanom   | 1   | 0     | 1     | 0             | 0          | 0           | 2     | 2                  | 0        | 0           | 2     |  |  |
| Roi Et          | 13  | 15    | 6     | 8             | 7          | 0           | 49    | 48                 | 1        | 0           | 49    |  |  |
| Yasathon        | 41  | 2     | 8     | 1             | 4          | 8           | 64    | 64                 | 0        | 0           | 64    |  |  |
| TOTAL           | 77  | 22    | 21    | 13            | 13         | 9           | 155   | 150                | 4        | 1           | 155   |  |  |
| Percent         | 50%                                       | 14%   | 14%   | 8%            | 8%         | 6%          | 100%  | 97%                | 3%       | 1%          | 100%  |  |  |

42. Almost 100% of the AHs are Thai Buddhists with 2 AHs claiming Lao ethnicity and 1 Christian. The Lao AHs are found in Nakhon Phanom and the lone Christian AH is from Sakon Nakhon I.

Table 11. Ethnicity and Religion of HHs by Road Segment

|                 |      | Et  | hnicity     |       |          |           | Religion |             |       |
|-----------------|------|-----|-------------|-------|----------|-----------|----------|-------------|-------|
| Location        | Thai | Lao | No response | Total | Buddhist | Christian | Others   | No response | Total |
| Sakon Nakhon    | 39   | 0   | 1           | 40    | 38       | 1         | 0        | 1           | 40    |
| Sakon Nakhon II | 29   | 0   | 1           | 30    | 29       | 0         | 0        | 1           | 30    |
| Sakon Nakhon I  | 10   | 0   | 0           | 10    | 9        | 1         | 0        | 0           | 10    |
| Nakhon Phanom   | 0    | 2   | 0           | 2     | 2        | 0         | 0        | 0           | 2     |
| Roi Et          | 49   | 0   | 0           | 49    | 49       | 0         | 0        | 0           | 49    |
| Yasathon        | 63   | 0   | 1           | 64    | 63       | 0         | 0        | 1           | 64    |
| TOTAL           | 151  | 2   | 2           | 155   | 152      | 1         | 0        | 2           | 155   |
| Percent         | 97%  | 1%  | 1%          | 100%  | 98%      | 1%        | 0%       | 1%          | 100%  |

43. **Socioeconomic Profiles.** The primary source of income amongst AHs is farming and roadside selling at 48% apiece. About 27 AHs are employees (as school teachers, policemen, government workers and the like) with 5 AHs each owning businesses and receiving pensions. It can be seen from the table that farmers, specifically paddy farmers are predominantly found in HW23 (Roi Et and Yasothon stretch) and roadside selling in HW22 (Sakon Nakhon and Nakon Phanom stretch).

Table 12. Primary Source of HH Monthly Income by Road Segment

| Location        | Employee | Farming | Roadside<br>Selling | Own<br>Business | Pension | Hired<br>Labor | No<br>response | Total |
|-----------------|----------|---------|---------------------|-----------------|---------|----------------|----------------|-------|
| Sakon Nakhon    | 0        | 8       | 31                  | 0               | 0       | 0              | 1              | 40    |
| Sakon Nakhon II | 0        | 8       | 21                  | 0               | 0       | 0              | 1              | 30    |
| Sakon Nakhon I  | 0        | 0       | 10                  | 0               | 0       | 0              | 0              | 10    |
| Nakhon Phanom   | 0        | 0       | 2                   | 0               | 0       | 0              | 0              | 2     |
| Roi Et          | 24       | 11      | 5                   | 0               | 0       | 9              | 0              | 49    |
| Yasathon        | 3        | 29      | 10                  | 5               | 5       | 11             | 1              | 64    |
| Total           | 27       | 48      | 48                  | 5               | 5       | 20             | 2              | 155   |
| Percent         | 17%      | 31%     | 31%                 | 3%              | 3%      | 13%            | 1%             | 100%  |

44. About 39% of AHs aver that farming is their secondary source of income - though 42% had no response or just failed to identify additional income source.

Table 13. Secondary Source of HH Monthly Income by Road Segment

|                 | ±01 000011aa1 | ,       |                     | meeme b         | , moda o       | 80             |       |
|-----------------|---------------|---------|---------------------|-----------------|----------------|----------------|-------|
| Location        | Employee      | Farming | Roadside<br>Selling | Own<br>Business | Hired<br>Labor | No<br>response | Total |
|                 |               |         | Selling             | Dusiliess       | Labor          | response       |       |
| Sakon Nakhon    | 0             | 3       | 8                   | 0               | 2              | 27             | 40    |
| Sakon Nakhon II | 0             | 2       | 8                   | 0               | 2              | 18             | 30    |
| Sakon Nakhon I  | 0             | 1       | 0                   | 0               | 0              | 9              | 10    |
| Nakhon Phanom   | 0             | 2       | 0                   | 0               | 0              | 0              | 2     |
| Roi Et          | 0             | 31      | 8                   | 0               | 3              | 7              | 49    |
| Yasathon        | 2             | 24      | 0                   | 1               | 6              | 31             | 64    |
| Total           | 2             | 60      | 16                  | 1               | 11             | 65             | 155   |
| Percent         | 1%            | 39%     | 10%                 | 1%              | 7%             | 42%            | 100%  |

45. Monthly HH income is clustered around the THB 20,001 and above (35%) bracket followed by the THB 5,001 – THB 10,000 bracket at 28%. Those with monthly income of less than THB 5,000 amount to 12% of total AHs. Monthly expenditure is largely estimated at the THB 5,0001 – THB 10,000 bracket (47%) followed by the THB 10,001 – THB 20,000 expenditure bracket (23%).

Table 14. HH Monthly Income and Expenditure by Road Segment

|                 |               |                | Month           | ly incom   | е           |       | Monthly expenses |                |                 |            |             |       |
|-----------------|---------------|----------------|-----------------|------------|-------------|-------|------------------|----------------|-----------------|------------|-------------|-------|
| Location        | Under<br>5000 | 5001-<br>10000 | 10001-<br>20000 | Over 20001 | No response | Total | Under<br>5000    | 5001-<br>10000 | 10001-<br>20000 | Over 20001 | No response | Total |
| Sakon Nakhon    | 4             | 19             | 11              | 5          | 1           | 40    | 5                | 18             | 10              | 6          | 1           | 40    |
| Sakon Nakhon II | 3             | 16             | 5               | 5          | 1           | 30    | 3                | 14             | 6               | 6          | 1           | 30    |
| Sakon Nakhon I  | 1             | 3              | 6               | 0          | 0           | 10    | 2                | 4              | 4               | 0          | 0           | 10    |
| Nakhon Phanom   | 0             | 1              | 1               | 0          | 0           | 2     | 0                | 1              | 1               | 0          | 0           | 2     |
| Roi Et          | 1             | 3              | 12              | 33         | 0           | 49    | 9                | 32             | 8               | 0          | 0           | 49    |
| Yasathon        | 14            | 20             | 13              | 16         | 1           | 64    | 12               | 22             | 16              | 13         | 1           | 64    |
| Total           | 19            | 43             | 37              | 54         | 2           | 155   | 26               | 73             | 35              | 19         | 2           | 155   |
| Percent         | 12%           | 28%            | 24%             | 35%        | 1%          | 100%  | 17%              | 47%            | 23%             | 12%        | 1%          | 100%  |

46. **Ownership of Land Outside the ROW.** Most AHs were able to identify ownership or use of lands outside the ROW to which 94% (1,817,552 sqm) are for agricultural use and 5% residential use. Nine percent did not respond, while 5% had wrong response — only indicating ownership or use but did not provide area.

Table 15. Land Area (sqm) by Land Use of HHs by Road Segment

| Location     | Residential | Commercial | Farmland | Pond | Forest | Total   | Wrong response | No response |
|--------------|-------------|------------|----------|------|--------|---------|----------------|-------------|
| Sakon Nakhon | 12,742      | 1,096      | 159,200  | -    | -      | 173,038 | 7              | 17          |

| Location        | Residential | Commercial | Farmland  | Pond  | Forest | Total     | Wrong response | No response |
|-----------------|-------------|------------|-----------|-------|--------|-----------|----------------|-------------|
| Sakon Nakhon II | 12,200      | -          | 109,600   | -     | -      | 121,800   | 3              | 15          |
| Sakon Nakhon I  | 542         | 1,096      | 49,600    | -     | -      | 51,238    | 4              | 2           |
| Nakhon Phanom   | 1,600       | -          | 24,000    | -     | -      | 25,600    | -              | -           |
| Roi Et          | 39,000      | -          | 492,200   | 1,600 | -      | 532,800   |                |             |
| Yasathon        | 48,282      | -          | 1,142,152 | -     | 8,000  | 1,198,434 | -              | 2           |
| Total           | 101,624     | 1,096      | 1,817,552 | 1,600 | 8,000  | 1,929,872 | 7              | 19          |
| Percent         | 5%          | 0.1%       | 94%       | 0.1%  | 0.4%   | 100%      | 5%             | 12%         |

47. As proof of ownership, 81% claim to possess title deeds or the Chanote. The most secure land title offering full individual ownership in Thailand is the Chanote (officially identified as Nor.Sor.4.Jor), followed by the Nor Sor Saam Gor/ Khor (4% of AHs) which offer confirmed right of possession. About 4 AHs rent or lease the lands they occupy.

Table 16. Proof of Land Ownership of HHs by Road Segment

| Location        | Rent or Lease | Title Deed (Chanote) | Nor Sor Sam Kor | No response | Total |
|-----------------|---------------|----------------------|-----------------|-------------|-------|
| Sakon Nakhon    | 4             | 16                   | 4               | 16          | 40    |
| Sakon Nakhon II | 1             | 13                   | 0               | 16          | 30    |
| Sakon Nakhon I  | 3             | 3                    | 4               | 0           | 10    |
| Nakhon Phanom   | 0             | 0                    | 0               | 2           | 2     |
| Roi Et          | 0             | 49                   | 0               | 0           | 49    |
| Yasathon        | 0             | 60                   | 1               | 3           | 64    |
| Total           | 4             | 125                  | 5               | 21          | 155   |
| Percent         | 3%            | 81%                  | 4%              | 14%         | 100%  |

48. **Quality of Life.** The most common ailment encountered by the AHs is colds (26%) and minimal responses on influenza, diarrhea and others. A significant 61% did not respond to this item.

Table 17. Common Ailments

| Location        | Cold | Flu | Diarrhea | Others | No response | Total |  |  |  |
|-----------------|------|-----|----------|--------|-------------|-------|--|--|--|
| Sakon Nakhon    | 22   | 6   | 4        | 3      | 7           | 42    |  |  |  |
| Sakon Nakhon II | 19   | 4   | 2        | 2      | 5           | 32    |  |  |  |
| Sakon Nakhon I  | 3    | 2   | 2        | 1      | 2           | 10    |  |  |  |
| Nakhon Phanom   | 1    | 0   | 1        | 1      | 0           | 3     |  |  |  |
| Roi Et          | 6    | 0   | 0        | 0      | 43          | 49    |  |  |  |
| Yasathon        | 12   | 2   | 1        | 2      | 47          | 64    |  |  |  |
| Total           | 41   | 8   | 6        | 6      | 97          | 158   |  |  |  |
| Percent         | 26%  | 5%  | 4%       | 4%     | 61%         | 100%  |  |  |  |

49. Drinking water is generally purchased by the AHs (83%) while 12 % avail of the public system and 5% artesian and shallow wells. For domestic use like bathing and washing, AHs mostly rely on the public system (88%) and artesian/shallow wells (9%).

Table 18. HH Water Sources HHs by Road Segment

|                 | , 0                         |           |        |          |                               |                 |        |          |                |       |  |
|-----------------|-----------------------------|-----------|--------|----------|-------------------------------|-----------------|--------|----------|----------------|-------|--|
|                 |                             | Drinking  | water  |          | Water for bathing and washing |                 |        |          |                |       |  |
| Location        | Well (Artesian/<br>Shallow) | Durchand  | Public | No       | Total                         | Well (Artesian/ | Public | Naighbar | No             | Total |  |
|                 | Shallow)                    | Purchased | system | response | Total                         | Shallow)        | system | neignboi | No<br>response | Total |  |
| Sakon Nakhon    | 2                           | 35        | 3      | 0        | 40                            | 10              | 29     | 1        | 0              | 40    |  |
| Sakon Nakhon II | 2                           | 25        | 3      | 0        | 30                            | 9               | 20     | 1        | 0              | 30    |  |
| Sakon Nakhon I  | 0                           | 10        | 0      | 0        | 10                            | 1               | 9      | 0        | 0              | 10    |  |
| Nakhon Phanom   | 0                           | 1         | 1      | 0        | 2                             | 0               | 2      | 0        | 0              | 2     |  |
| Roi Et          | 5                           | 44        | 0      | 0        | 49                            | 1               | 48     | 0        | 0              | 49    |  |
| Yasathon        | 0                           | 49        | 14     | 1        | 64                            | 3               | 58     | 0        | 3              | 64    |  |

|          |                             | Drinking  |               |             | Water for bathing and washing |                             |                        |    |             |       |
|----------|-----------------------------|-----------|---------------|-------------|-------------------------------|-----------------------------|------------------------|----|-------------|-------|
| Location | Well (Artesian/<br>Shallow) | Purchased | Public system | No response | Lotal                         | Well (Artesian/<br>Shallow) | Public system Neighbor |    | No response | Total |
| Total    | 7                           | 129       | 18            | 1           | 155                           | 14                          | 137                    | 1  | 3           | 155   |
| Percent  | 5%                          | 83%       | 12%           | 1%          | 100%                          | 9%                          | 88%                    | 1% | 2%          | 100%  |

50. Almost all AHs are connected to the grid -99% - and the main source for cooking fuel is the liquefied petroleum gas (LPG) (48%) followed by combinations (41%) of LPG, firewood, charcoal and electricity.

Table 19. Lighting and Cooking Fuel Sources of HHs by Road Segment

| Power source for lighting |             |             |       | Fuel Used for Cooking |          |     |          |             |             |       |  |  |
|---------------------------|-------------|-------------|-------|-----------------------|----------|-----|----------|-------------|-------------|-------|--|--|
| Location                  | Electricity | No response | Total | Electricity           | Charcoal | LPG | Firewood | Combination | No response | Total |  |  |
| Sakon Nakhon              | 40          | 0           | 40    | 1                     | 3        | 20  | 1        | 14          | 1           | 40    |  |  |
| Sakon Nakhon II           | 30          | 0           | 30    | 0                     | 3        | 12  | 1        | 13          | 1           | 30    |  |  |
| Sakon Nakhon I            | 10          | 0           | 10    | 1                     | 0        | 8   | 0        | 1           | 0           | 10    |  |  |
| Nakhon Phanom             | 2           | 0           | 2     | 0                     | 0        | 0   | 0        | 2           | 0           | 2     |  |  |
| Roi Et                    | 49          | 0           | 49    | 0                     | 1        | 48  | 0        | 0           | 0           | 49    |  |  |
| Yasathon                  | 62          | 2           | 64    | 1                     | 3        | 6   | 4        | 48          | 2           | 64    |  |  |
| Total                     | 153         | 2           | 155   | 2                     | 7        | 74  | 5        | 64          | 3           | 155   |  |  |
| Percent                   | 99%         | 1%          | 100%  | 1%                    | 5%       | 48% | 3%       | 41%         | 2%          | 100%  |  |  |

51. As regards toilet facilities, most of the AHs utilize the squat toilet type (67%), followed by water-sealed (30%). No report of open defecation.

Table 20. Toilet Facilities of HHs by Road Segment

| Table 201 Tonet Facilities of This by Hoda 968. Tent |              |              |      |             |       |  |  |  |  |  |
|--|--------------|--------------|------|-------------|-------|--|--|--|--|--|
| Location   | Water-sealed | Squat toilet | None | No response | Total |  |  |  |  |  |
| Sakon Nakhon   | 13           | 25           | 2    | 0           | 40    |  |  |  |  |  |
| Sakon Nakhon II                                      | 8            | 20           | 2    | 0           | 30    |  |  |  |  |  |
| Sakon Nakhon I                                       | 5            | 5            | 0    | 0           | 10    |  |  |  |  |  |
| Nakhon Phanom  | 1            | 1            | 0    | 0           | 2     |  |  |  |  |  |
| Roi Et   | 18           | 31           | 0    | 0           | 49    |  |  |  |  |  |
| Yasathon   | 15           | 47           | 0    | 2           | 64    |  |  |  |  |  |
| Total  | 47           | 104          | 2    | 2           | 155   |  |  |  |  |  |
| Percent  | 30%          | 67%          | 1%   | 1%          | 100%  |  |  |  |  |  |

52. In terms of ownership of appliances, the most common at 16% apiece are television, refrigerator, and electric fan. Note that the total is 925 appliances inasmuch as the 155 AH declared more than 1 appliance per HH. The least used are the electric stove/oven (2%), microwave (3%), and computer (5%).

Table 21. HH Ownership of Appliances by Road Segment

| Location        | TV  | Ref | AC | Radio/<br>Cassette | Microwave<br>Oven | Washing Machine | Phone | DVD/CD<br>Player | Electric oven/stove | Electric<br>Fan | Computer | Total |
|-----------------|-----|-----|----|--------------------|-------------------|-----------------|-------|------------------|---------------------|-----------------|----------|-------|
| Sakon Nakhon    | 39  | 37  | 9  | 9                  | 6                 | 30              | 23    | 5                | 9                   | 34              | 14       | 215   |
| Sakon Nakhon II | 30  | 27  | 4  | 7                  | 3                 | 23              | 16    | 4                | 5                   | 24              | 7        | 150   |
| Sakon Nakhon I  | 9   | 10  | 5  | 2                  | 3                 | 7               | 7     | 1                | 4                   | 10              | 7        | 65    |
| Nakhon Phanom   | 2   | 2   | 0  | 2                  | 0                 | 2               | 2     | 0                | 0                   | 2               | 1        | 13    |
| Roi Et          | 49  | 49  | 26 | 21                 | 17                | 45              | 47    | 35               | 6                   | 48              | 23       | 366   |
| Yasathon        | 61  | 58  | 13 | 18                 | 5                 | 38              | 56    | 9                | 4                   | 60              | 9        | 331   |
| Total           | 151 | 146 | 48 | 50                 | 28                | 115             | 128   | 49               | 19                  | 144             | 47       | 925   |
| Percent         | 16% | 16% | 5% | 5%                 | 3%                | 12%             | 14%   | 5%               | 2%                  | 16%             | 5%       | 100%  |

53. The most common mode of transportation owned by the AHs is the motorcycle (34%), followed by bicycle (23%) and car (21%). The least is farm truck (5%). Again, an AH may own more than one transport service.

|                 |         |            |       |     | ,          |       |
|-----------------|---------|------------|-------|-----|------------|-------|
| Location        | Bicycle | Farm truck | Truck | Car | Motorcycle | Total |
| Sakon Nakhon    | 17      | 3          | 12    | 14  | 25         | 71    |
| Sakon Nakhon II | 13      | 2          | 7     | 10  | 19         | 51    |
| Sakon Nakhon I  | 4       | 1          | 5     | 4   | 6          | 20    |
| Nakhon Phanom   | 2       | 1          | 1     | 1   | 2          | 7     |
| Roi Et          | 22      | 1          | 19    | 36  | 45         | 123   |
| Yasathon        | 37      | 12         | 22    | 21  | 43         | 135   |
| Total           | 78      | 17         | 54    | 72  | 115        | 336   |
| Percent         | 23%     | 5%         | 16%   | 21% | 34%        | 100%  |

## IV. Consultation and Participation, and Information Disclosure

## A. Consultation and Participation

- 54. Meaningful consultations will be carried out with the entitled parties/APs including vulnerable groups to ensure participation from planning up to implementation. Meaningful consultation is a process that: (i) begins early in the project preparation stage and will be carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information in an understandable form and language and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues. Particular attention will be provided to the needs of vulnerable group and ensure their participation.
- 55. To ensure meaningful consultation with and participation of local communities, the project will determine (i) appropriate mechanisms and structures for carrying out consultation and building participation; (ii) identification of stakeholders and their potential roles; (iii) specific activities that will enable communities to engage in the project; (iv) establish procedures for redress of grievances of affected people.
- 56. Consultations for this RP have been conducted during project preparation:
  - (i) Nong Kung Village, Phang Khon Tambun, Phong Khon, Sakon Nakhon; 07 March 2017 (1:30 pm)
  - (ii) Muang Thai Soe, Kusuman Sub-district, Sakon Nakhon District; 08 March 2017-05-29 (10 am)
  - (iii) Sawang Daen Din Subdistrict, Sakon Nakhon District; 08 March 2017 (2 pm)
  - (iv) Wong Ta Mua Municipality, Nakon Phanom Province; 09 March 2017 (10 am)
- 57. The DOH sub-district offices, assisted by the technical assistance consultants, conducted public meetings in strategic villages in the four road segments of NH22 and NH23. Topics discussed at preparation stage included (See details in Appendix 3): (i) An orientation on the project, project designs, and schedules of implementation; (ii) Probable benefits, adverse impacts, and mitigating measures to be taken; (iii) Grievance process; and (iv) Subsequent schedule of meetings and activities, i.e., conduct of IOL-SES.

58. Key issues raised, common to the four road segments of NH22 and NH 23 as addressed by DOH are as follows: (i) Acknowledgement that DOH owns the land in the right-of-way since the 1970s. By the road side, there are signs declaring ownership of the DOH and informing of not trespassing (Figure 6); (ii) APs expressed their willingness to stop using the land within ROW, seeing there is greater benefit of the extension of the road for better transportation and increased value of land along the road; (iii) Clarity on the project description; design details, i.e., elevated median, drainage, etc; and (iv) Concern for road safety especially for children – need for cross over, U-turns, and lighting. These are now incorporated towards design finalization.



B. Disclosure of Information

59. The DOH is required under ADB SPS (2009) to provide information to and consult with the affected communities and other stakeholders in a manner appropriate for the anticipated project impacts. This requirement is intended to facilitate engagement so as to establish and maintain constructive relationships over the life of the project. A project information material - leaflet or brochure - will be made available to affected communities in Thai and disseminated to the project communities and local governments. Draft PIBs are provided in Appendix 4 in English in Thai.

- 60. DOH will disclose to the AHs the following documents: (i) Prior to the submission of the full report to ADB for review and approval, a summary of the draft updated RP in Thai to be posted in DOH district/sub-district offices, and Tambon offices; (ii) the final updated RP approved both by DOH and ADB; and (iii) any revisions to the updated RP as a result of changes in scope or design layout. Key information in the updated RP to be disclosed to the AHs include (i) summary of impacts, (ii) entitlements and special provisions, (iii) grievance procedures, (vi) timing of provision of in-kind assistance, and (vii) displacement schedule.
- 61. Information dissemination to members of the affected communities will be conducted and the following shall be observed: (i) Notices of meetings shall be delivered and posted in conspicuous places or announced in the area where the meeting shall be conducted at least two (2) weeks before the scheduled meeting; (ii) All meetings and proceedings shall be conducted in a process and language spoken and understood by the affected communities; and (iii) The minutes of meetings or proceedings conducted shall be written in English or Thai.
- 62. During project implementation, DOH will prepare monitoring reports on the RP implementation and submit the same to ADB for review. The ADB SPS (2009), ADB Public Communication Policy (2012) as well as government issuances will serve as guides.

#### V. Grievance Redress Mechanisms

- 63. Grievances are issues, concerns or complaints that may be raised by stakeholders about the implementation of the project. There is an existing grievance redress mechanism (GRM) that has been established by the DOH and the local government. The GRM provides a systematic process for receiving, validating, and resolving complaints from affected people and is designed to achieve the following: (i) Serve as an open channel for effective communication of environmental issues and concerns arising from the project; (ii) Allow prompt action or resolution of any complaint or adverse environmental impacts that may occur during project construction and operation; (iii) Serve as a means to hear community suggestions on the project; and (iv) Promote transparency in project implementation.
- 64. Any affected person may raise and submit a grievance if the activity has detrimental impact on the environment, the community, or the quality of life of the people. Examples of grievances are dissatisfaction with assistance provided in relocation of stalls, temporary impacts on assets (structures and land), adverse changes on way of life and livelihood; peace and order problems due to presence of migrant workers; and failure of the project to address road safety for the affected communities.

## A. Modes of Receiving Grievances

- 65. The Project Engineer manages all matters related to the construction of the project and is the focal person for receiving and resolving complaints received from the public about project implementation. An Information Board visible to the community will be posted at the construction site to update the public about the ongoing project activities including the focal person and contact number where grievances could be raised.
- 66. A complaint or issue may also be raised by the public through other existing modes of entry, which is then referred to the Project Engineer for immediate action. These existing

modes of entry are (i) project engineer and/or construction project office, (ii) DOH District office, (iii) DOH complaints center which is accessible through the DOH website (http://complain.doh.go.th/complain/index.php), (iv) DOH Hotline 1586, (v) complaints center called Damrongdhama Centre at under the Department of Local Administration, and (vi) a separate Damrongdhama Centre at the provincial government office. Other entry points and modes of access are through face-to-face meetings with the DOH, written complaints, and telephone call at DOH district offices.

#### B. Grievance Resolution Process

- 67. In compliance with the requirements of Constitution of the Kingdom of Thailand B.E. 2550 (2005), ADB SPS (2009) and the ADB Public Communication Policy (PCP, 2012), the project shall comply with the requirements on public consultation and information disclosure. Meaningful consultation with affected people and other concerned stakeholders, including civil society, was conducted to present the proposed project at the early stage of project planning and implementation. This enabled DOH to hear the views of affected people and stakeholders for consideration in the finalization of the project design and to identify appropriate mitigation measures. The consultation process proceeds on an ongoing basis throughout the project cycle.
- 68. During project construction, the Project Engineer will be responsible in receiving and handling complaints or query regarding the project. Once the project is turned-over to the DOH District offices for maintenance and operation, the assigned focal person of the DOH District will be in-charge of managing the grievance redress mechanism (GRM).
- 69. **Management of Grievances.** A community member can approach the Project Engineer for complaints or query. Although several channels of communication exist, contacting the Project Engineer directly is the most efficient way to address the grievances. The focal person at the project's construction office will maintain a Record Book to track the following details: (i) Date of the complaint; (ii) Details of the complainant such as name and contact information; (iii) Description of the grievance; and (iv) Responsible entity.
- 70. During the construction phase of the project, complaints from affected persons may be lodged directly to the Project Engineer through the hotline placed on notice boards outside the construction site. The Project Engineer should be able to immediately contact the affected person to discuss the nature of the complaint and the actions to be undertaken to resolve the complaint. Any complaint filed or raised should be immediately addressed as soon as possible; typically matters that can be dealt with immediately should be responded to within 7 working days upon receipt of the complaint while some matters that entail modification to the construction contract or require higher level approval may take longer to resolve. Apart from complaints filed directly to the Project Engineer, those that submitted to other channels of DOH, i.e. District Office, Hotline 1586, DOH website, will be transferred to the PMU and subsequently to the Project Engineer for resolution. If the complaint is not satisfactorily resolved by the project, the affected person can use the Government's GRM.
- 71. Following the grievance redress procedures that was established by the Government, e.g. local level Damrongdhama Center, the inquiry will be sent to the Project Engineer for verification and resolution. For matters that need verification with the involved members of the community, the Project Engineer will consult with the village head or natural leader for validation and deliberation. During this process, the village head may discuss with the affected person, or setup a meeting among the community members, along with Project

Engineer and the contractor to discuss the resolution of the grievance. The Project Engineer shall be responsible in coordinating with the affected person and the village head in taking actions towards the resolution of complaints. A construction-related complaint will be promptly referred to the contractor for resolution while the PMU will monitor the mitigation measures implemented by the contractor with a view of avoiding recurrence of the problem. Based on practice, complaints are resolved at the village level and no longer go through the next level of the executive branch of the government.

- 72. If the complainant is still not satisfied with the actions undertaken to resolve the complaint, he/she may file the complaint with the Provincial Damrongdhama Centre who will conduct further investigation of the grievance and call on the affected person, PMU/DOH District, and the contractor to discuss the resolution of the complaint.
- 73. If the grievance remains unresolved after going through the hierarchy of the local government's grievance redress process, the affected person has the option to elevate the case to the judicial body.
- 74. **ADB's Accountability Mechanism.** In addition to the project GRM, ADB's accountability mechanism (May 2012) also applies to the project. The accountability mechanism provides opportunities for people that are adversely affected by ADB-financed projects to express their grievances, seek solutions, and report alleged violations of ADB's operational policies and procedures, including safeguard policies. ADB's accountability mechanism comprises of (i) consultation led by ADB's special project facilitator to assist people adversely affected by ADB-assisted projects in finding solutions to their concerns and (ii) providing a process through which those affected by projects can file requests for compliance review by ADB's Compliance Review Panel.

## **VI. Legal Framework**

#### A. National and Local Policy Framework

- 75. The Kingdom of Thailand has several policies related to land acquisition and compensation. The principal legal instruments that presently have bearing on resettlement in the GMS Highway Expansion Project are the country's 2007 Constitution, the Expropriation of Immovable Property Act of B.E. 2530 (1987), the Highway Act of B.E. 2535 (1992), and the Highway Act of B.E. 2549 (2006).
- 76. The 2007 Constitution. Section 41 of the 2007 Constitution of the Kingdom of Thailand guarantees the right of a person to own, inherit, or sell properties. Relatedly, Section 42 mandates that the expropriation of immovable properties may only be done through the enactment of a law (Royal Decree) for public purpose, such as national defense; exploitation of national resource; town and country planning; promotion and preservation of the quality of the environment; agricultural or industrial development; land reform; conservation of ancient monuments and historic sites; or other public interests. However, Section 42 requires fair compensation to be paid in due course to the affected owner, including other persons who have rights to the affected properties. The amount of compensation for the expropriated property "shall be fairly assessed with due regard to the normal market price, mode of acquisition, condition and location of the immovable property, loss of the person whose property or right thereto is expropriated, and benefits that the State and the person whose property or right thereto is expropriated may receive from the use of

the expropriated property". Section 42 further provides that if the expropriated properties are not used for the purpose they have been acquired by the government within the stipulated period, ownership over the same will revert back to their original owners or to their heir.

- 77. Sections 56 to 58 of the 2007 Constitution are devoted to the right of citizens to have access to public information, unless the disclosure of such information would compromise State security, public safety, and the interests of other persons as provided by law. Section 57 clearly accords citizen the right "to receive information, explanation and justification from a government agency, State agency, State enterprise or local government organization before permission is given for the operation of any project or activity which may affect the quality of the environment, health and sanitary conditions, the quality of life or any other material interest concerning him or a local community and shall have the right to express his opinions on such matters to the concerned agencies for their consideration". For this purpose, the government shall hold public consultations before the execution of development plans, "the expropriation of immovable property, the making of town and country planning, the determination of land use, and the enactment of rule which may affect (the) ... interest of the public".
- 78. Section 59, on the other hand, grants a citizen the right to petition the decision of government and to be informed of the outcome of said petition within an appropriate time.
- 79. **Expropriation of Immovable Property (EIP) Act of B.E. 2530 (1987).** The EIP Act vests government the power to expropriate land for public purpose. Consistent with the law's title, the EIP is basically applicable to land and immovable improvements thereat that are covered with title or legally recognized possessory rights. In other words, the EIP is not for informal settlers. Provisions of the EIP which are particularly relevant to road projects are provided below.
  - (i) Article 6. A Royal Decree will be issued identifying the properties to be expropriated.
  - (ii) Article 7. The Royal Decree will be posted in various public places for the general information of the people.
  - (iii) Article 9. After completion of the assessment of the assets to be expropriated, the Minister who initiated the expropriation as mentioned in the Royal Decree will set up the Preliminary Compensation Setting Committee (PCSC) that is tasked to determine the amount of compensation for the affected properties. Members of the PCSC will come from the ministry initiating the expropriation proceedings, the Department of Land (DOL), a representative from another government agency, and a representative from the local government.
  - (iv) Article 10. Authority is given to an officer from the Ministry initiating the expropriation proceedings to negotiate with the property owners, to buy and to sell the properties to be expropriated.
  - (v) Article 25 grants the property owner 60 days upon receipt of the notice to collect compensation from the Ministry the opportunity to appeal directly to the Ministry if said property owner is not satisfied with the proffered compensation. The Ministry in turn has 60 days within which to act on the appeal.
  - (vi) Article 26 grants the property owner the right to bring his/her case before a court of law if he/she is not satisfied with the action taken by the Ministry.
  - (vii) Section 21 provides the criteria within which the PCSC will calculate the compensation for the expropriated properties, thus:

- Market price of the immovable property at the time the Royal Decree has been issued.
- Assessed value of the property (for local tax purposes).
- Assessed value of the property when registering for title.
- Location and attributes of the property.
- Reason for the expropriation.
- Damages to be incurred by the property owner when relocating as a consequence of the expropriation.
- (viii) Section 22 provides that if the property has not been utilized by its owner, the amount to be offered by the PCSC for the property could be lower than what it would normally fetch on the basis of the aforementioned criteria but it should not be lower than the amount paid by the owner when he/she acquired the same
- (ix) Section 24 mandates that land prices cannot be jacked up at a level beyond what the affected properties would normally fetch before the Royal Decree is announced so as to forestall profiteering.
- 80. For its part, DOH in 1992 issued a regulation on land acquisition whereby prior to the enactment of a Royal Decree for expropriation, the department would already negotiate with property owners. The agreed amount of compensation cannot be renegotiated by the property owner when the Royal Decree is later announced.
- 81. The EIP does not exempt property owners from paying transfer fees and taxes for expropriated assets.
- 82. **Highway Act of 1992 and Highway Act of 2006.** The Highway Act of 1992 and Highway Act of 2006, which amended some sections of the former, provide a wide range of power to the Department of Highways relative to the determination of the road ROW, and the preservation and use of the same. While both Highway Acts grant the Director of the DOH the power to remove or demolish any obstructions or structures built inside the ROW without permission from the department, these laws (Section 37 of Highway Acts of 1992, and Section 47 of Highway Act of 2006) also provide the DOH the authority to allow the use of the ROW based on conditions, including payment of fees, to be set by the Director. The permission, however, may be revoked at any time and the structures in the ROW will have to be removed at no cost to the government.

## **B. ADB Safeguards Policy**

- 83. The aim of **ADB Policy on Involuntary Resettlement** is to avoid or minimize the impacts on people, households, businesses and others affected by the acquisition of land and other assets, including livelihood and income, for projects assisted by the Bank. Where resettlement is not avoidable, the overall goal of the ADB policy is to help restore the living standards of the AHs to at least their pre-Project levels through the provision of compensation at replacement cost for lost assets, including other forms of assistance, as needed.
- 84. The main objectives and principles of ADB's policy on involuntary resettlement are as follows:
  - (i) Involuntary resettlement should be avoided where feasible.

- (ii) Where population displacement is unavoidable, it should be minimized by exploring all viable project options.
- (iii) All compensation is based on the principle of replacement cost.
- (iv) Each involuntary resettlement is conceived and executed as part of project or program development.
- (v) Affected persons (APs) should be fully informed and consulted on compensation and/or resettlement options.
- (vi) Institutions of the APs, and, where relevant, of their hosts, are to be protected and supported. APs are to be assisted to integrate economically and socially into host communities so that adverse impacts on the host communities are minimized and social harmony is promoted.
- (vii) The absence of a formal legal title to land is not a bar to ADB policy on entitlements.
- (viii) APs people are to be identified and recorded as early as possible in order to establish their eligibility through a population record or census that serves as an eligibility cut-off date, preferably at the project identification stage, to prevent a subsequent influx of encroachers or others who wish to take advance of such benefits.
- (ix) Particular attention must be paid to the needs of the poorest AHs and other vulnerable groups that are at high risk of impoverishment. This may include AHs without legal title to land or other assets, households headed by women, the elderly or disabled, and ethnic minority peoples. Appropriate assistance must be provided to help them improve their socio-economic status.
- (x) The full costs of resettlement and compensation should be included in the calculation of project costs and benefits.
- (xi) Relocation and rehabilitation may be considered for inclusion in ADB loan financing for the project, if requested, to assure the timely availability of required resources and to ensure compliance with involuntary resettlement procedures during implementation.
- 85. **ADB's Policy on Indigenous Peoples** defines "indigenous peoples" as "those with a social or cultural identity distinct from the dominant or mainstream society". "Indigenous peoples" is a generic concept that includes cultural minorities, ethnic minorities, indigenous cultural communities, tribal people, natives, and aboriginals. The Policy recognizes the potential vulnerability of ethnic minorities in the development process; that ethnic minorities must be afforded opportunities to participate in and benefit from development equally with other segments of society; and, have a role and be able to participate in the design of development undertakings that affect them.
- 86. The policy on indigenous peoples is "designed to promote the participation of indigenous peoples in project preparation and implementation, to ensure that they benefit from development undertakings that affect them, and to provide effective safeguards against any adverse impacts". In any ADB involvement, the approaches to be used are as follows: (i) to achieve the greatest possible reduction of poverty among the affected indigenous peoples; (ii) when negative impacts are unavoidable, they should be minimized as much as possible, and appropriate measures will be taken to mitigate the adverse impacts; (iii) in enhancing the benefits of a development undertaking for indigenous peoples or reducing the negative impacts of the same, clear mechanisms for accurate and objective analysis of their circumstances will be prepared; and (iv) the mechanisms for any development undertaking must be transparent and should ensure accountability.

- 87. **ADB's Policy on Gender and Development** adopts gender mainstreaming as a key strategy for promoting gender equity, and for ensuring that women participate and that their needs are explicitly addressed in the decision-making process. For projects that have the potential to have substantial gender impacts, a gender plan is prepared to identify strategies to address gender concerns and the involvement of women in the design, implementation and monitoring of the project.
- 88. Other policies of the ADB that have bearing on resettlement planning and implementation are the Public Communications Policy (2012) and Accountability Mechanism (2012).

#### C. Comparison of Government Law and Regulations with ADB Policies

- 89. Based on the preceding sections, there are some differences between existing laws and government practices and ADB's policies relative to addressing resettlement. The differences lie mainly on the fact that existing national laws and government practices are basically confiscatory in nature, dealing mainly on the power of the State to acquire private properties for the public good and the right of property owners to get fair compensation. On the other hand, ADB's resettlement policy covers both titled holders and informal occupants or settlers and is not confined to matters on compensation. Moreover, ADB's resettlement policy puts emphasis on the restoration of livelihood and standards of living of the APs, on the APs' opportunity to take part in project design and implementation, and on mechanisms that ensure that APs have the opportunity to have their complaints heard and resolved.
- 90. Table 23 highlights the key areas in resettlement where major gaps exist between national laws and practices of Thailand, on one hand, and ADB policies, on the other hand.

Table 23. Gap Matrix

| Table 23. Gap Matrix                  |                                      |                                |  |  |  |  |  |  |  |
|---------------------------------------|--------------------------------------|--------------------------------|--|--|--|--|--|--|--|
| ADB Policy Principle                  | THA National Laws                    | Project Policy                 |  |  |  |  |  |  |  |
| Pay particular attention to the       | National laws and government         | The standard of living of the  |  |  |  |  |  |  |  |
| needs of vulnerable groups,           | practices provide the framework      | APs, regardless of tenure      |  |  |  |  |  |  |  |
| especially those below the poverty    | within which government agencies     | stature, shall be restored to  |  |  |  |  |  |  |  |
| line, the landless, the elderly,      | could acquire private properties in  | pre-project level;             |  |  |  |  |  |  |  |
| women and children, and               | pursuit of development projects      |                                |  |  |  |  |  |  |  |
| Indigenous Peoples, and those         | for the public good, while at the    | For poor and vulnerable,       |  |  |  |  |  |  |  |
| without legal title to land, and      | same time ensuring that property     | assistance to improve their    |  |  |  |  |  |  |  |
| ensure their participation in         | owners are paid fair                 | socio-economic conditions      |  |  |  |  |  |  |  |
| consultations. (Policy Principle 2)   | compensation.                        | shall be provided.             |  |  |  |  |  |  |  |
| Improve the standards of living of    | Under national laws and practices    | The standards of living of the |  |  |  |  |  |  |  |
| the displaced poor and other          | "vulnerable" sectors of the          | poor and other vulnerable      |  |  |  |  |  |  |  |
| vulnerable groups, including          | affected population, such as the     | groups, including women,       |  |  |  |  |  |  |  |
| women, to at least national           | poor, the disabled, female           | shall be addressed by the      |  |  |  |  |  |  |  |
| minimum standards. (Policy            | household heads, ethnic              | project to at least national   |  |  |  |  |  |  |  |
| Principle 5)                          | minorities, and the elderly, are not | minimum standards.             |  |  |  |  |  |  |  |
|                                       | part of the equation in determining  |                                |  |  |  |  |  |  |  |
|                                       | compensation and other forms of      |                                |  |  |  |  |  |  |  |
|                                       | assistance for displaced people.     | All the color                  |  |  |  |  |  |  |  |
| Ensure that displaced persons         | With the exception of project-       | AHs without titles to land or  |  |  |  |  |  |  |  |
| without titles to land or any         | specific Cabinet resolutions         | any recognizable legal rights  |  |  |  |  |  |  |  |
| recognizable legal rights to land are | addressing resettlement, current     | to land are eligible for       |  |  |  |  |  |  |  |
| eligible for resettlement assistance. | national laws and practices are      | assistance.                    |  |  |  |  |  |  |  |
| (Policy Principle 7)                  | focused on property holders with     |                                |  |  |  |  |  |  |  |
|                                       | titles. APs with no titles over the  |                                |  |  |  |  |  |  |  |

| ADB Policy Principle | THA National Laws   | Project Policy |
|----------------------|---|----------------|
|                      | affected properties or assets are not entitled to compensation. However, by way of a Cabinet resolution, affected structures on State land may be compensated in the form of allowances. However, this is rarely resorted to. |                |

#### D. Project Policies on Resettlement

- 91. Bearing in mind the policy gaps between the Government of Thailand and the ADB, this chapter lays out the purpose, principles, and procedures to be used in the preparation and implementation of the Project, especially for addressing its adverse social impacts.
- 92. The overall objective of this Resettlement Policy is to help ensure that AHs are not worse off because of the Project; rather, they should be able to maintain or improve their pre-Project living standards and income-earning capacity. The Project will also provide an opportunity for the local population to derive benefits from it. Likewise, the Project will serve as an occasion for the local population to participate in its planning and implementation, thereby engendering a sense of ownership over this development undertaking.
- 93. **Reconciling government practices and ADB policy on resettlement.** In pursuit of the above resettlement objectives, the following principles and rehabilitation measures are adopted:
  - (i) No site clearing inside the ROW along road sections where there are AHs until and after the RP has been updated and approved both by the DOH and the ADB, and until and after all entitlements/assistance due to the APs as mandated by this resettlement policy have been given.
  - (ii) Shops owners will be assisted in gradually dismantling and setting up their shops in a new location outside the ROW to be identified by them and agreed by both parties, in a way that will allow them to gradually phase out their operation in their old place and gradually begin their operation in their new place. Under this arrangement, the shop owners, whose business caters to road users, will not experience any stoppage in their operation, thereby averting severe impact on the APs' livelihood.
  - (iii) Farmers presently tilling plots alongside the ROW will be provided at least 3 months advance notice to harvest their crops before the start of civil works in a particular segment of the project road.
  - (iv) AHs will be fully consulted and given the opportunity to participate in matters that will have adverse impacts on their lives during the design, updating and implementation of the RP.
  - (v) Any temporary impacts on land and communal infrastructure outside the ROW during construction will be restored.
  - (vi) There shall be effective mechanisms for hearing and resolving grievances during the planning, updating and implementation of the RP.
  - (vii) Existing cultural and religious practices shall be respected and, to the extent possible, preserved.
  - (viii) Special measures will be incorporated in the RP to protect socially and economically vulnerable groups who face greater risk of further hardship, such

- as households headed by women and/or the disabled, landless households, children and elderly people without support structures, and people living in poverty. Appropriate assistance will be provided to help AHs belonging to any of these vulnerable groups improve their socio-economic status.
- (ix) Adequate resources will be identified and committed during the preparation of the RP that includes adequate support to be made available to cover resettlement costs within the agreed implementation period of the Project; and, adequate human resources for supervision, liaison and monitoring of resettlement and rehabilitation activities.
- (x) Appropriate reporting, monitoring and evaluation mechanisms will be identified and set in place as part of the resettlement management system.
- (xi) The RP or its summary will be translated in Thai and placed in sub-district and village offices for the information of AHs as well as other interested groups.
- (xii) Civil works contractors will not commence for any section or segment of the Project route until a) the provision of in-kind assistance for AHs within that segment has been completed satisfactorily; b) agreed rehabilitation measures are in place; and c) the area is free from all encumbrances. The schedule of the start of civil works in any section or segment of the Project route will be coordinated and planned with the participation of the resettlement and grievance redress working groups whose members include the village head and unit members, together with representatives from the sub-district DOH, the civil works contractor, relevant local government, and the AHs.

#### VII. Entitlements, Assistance and Benefits

#### A. Project Eligibility and Entitlements

- 94. **Cut-Off Date and Eligibility**. Cut-off date refers to the date prior to which the occupation or use of the project area makes users of the same eligible to be categorized as AP, regardless of tenure status. The cut-off date of the project coincides with the date of completion of the census of affected persons and inventory of losses (IOL) done in March 2017 and validated/completed in 08 May 2017. Thus cut-off date is 08 May 2017 for all segments of the road project.
- 95. **Entitlements.** It is reiterated at this point that DOH owns the land in the right of way since 1970s. By the road side, there are signs declaring ownership of the DOH and informing of not trespassing. During consultations APs noted the benefits of the extension of the road better transportation and prices of their lands in the vicinity would increase.
- 96. Based on the impacts identified during the IOL, the corresponding entitlements to be provided to the AHs are presented in the entitlement matrix below. The Resettlement and Grievance Redress Working Group will agree on an appropriate schedule for the civil works and will notify the AHs 3 months in advance of the start of construction in a particular section or segment of the Project route.

Table 24. Entitlement Matrix

| Type of  |   |  |
|--|---|--|
| Loss/Impacts   | Eligible Persons  | Entitlements   |
| Loss of use of productive land alongside the ROW (AHs are cultivating the un-used portions of the ROW to augment their own farms outside of the ROW) | All farmers utilizing ROW land for productive use (although, they have been using it without permission, and aware that it is against the law)  | APs will be informed in sufficient time to harvest their crops, and no further cultivation in the season prior to construction.  |
| Loss of use of shops alongside the ROW   | Owners of shops alongside the ROW (although, they have been using it without permission, and aware that it is against the law)  | DOH and civil works contractor will help dismantle, and transfer the shops to their preferred relocation sites outside of the ROW in a way that will allow gradual transfer of business operation to the new site, thereby avoiding any business disruption.   |
| Loss of or damage to crops   | Owners regardless of tenure status  | APs will be informed in sufficient time to harvest their crops, and no further cultivation in the season prior to construction.  |
| Loss of, or damage to<br>Public Facilities<br>(Government-owned<br>structures)   | Local government  | The facilities in the ROW are owned by DOH. Some structure (i.e. roadside public shelter) will be removed, and some will be added later according to the design of the rehabilitation.   |
| Higher risks of hardship due to impacts on house and shops, loss of paddy land alongside the ROW   | AHs that fall within the official category of "poor", and those that are headed by females and/or those headed by the disabled with no other gainfully employed or earning members of the household | <ul> <li>Greater care and attention will be provided to these AHs during the transfer of their shops which will be spearheaded by the Project Engineer to spare them any additional hardship. Self-relocation of shops will be upheld but in consultation with the RGRWG.</li> <li>For the 49 vulnerable AHs and the 11 severely affected households, arrangements are made with the local governments to include the vulnerable and severely affected households with livelihood assistance initiated by the Community Development Office of the local government.</li> </ul> |
| Impacts during Construction  |   | <ul> <li>Contractors and DOH will assist AHs seek alternate areas should they be temporarily affected during construction.</li> <li>Land outside of the ROW that is adversely impacted by construction activities will be compensated in cash or in-kind at replacement cost by the civil works contractor.</li> </ul>   |

# B. Special Assistance to Vulnerable Sector and Severely AHs: Livelihood Assistance Support

97. Vulnerable AHs are entitled to participate in government sponsored livelihood support programs that match their needs and profile. The DOH, through PMU and specifically the CSC resettlement specialist (See section A. Implementation Arrangements) will match the needs of the vulnerable and severely AHs with prevailing local government initiatives. The

AHs shall be enrolled in these livelihood programs with the intercession of DOH. The AHs will also be given preferential opportunity for employment with the contractor for the road extensions along NH22 and NH23. PMU will ensure that all of the vulnerable households will get all information easily and are able to access and avail assistance prior to land clearance.

- 98. Initial discussions have been made for the Project with the District Community Development Offices and a potential link for livelihood assistance support is the One Tambon One Product. OTOP stands for 'One Tambon (meaning sub-district) One Product'. It is a local entrepreneurship stimulus program which aims to support the unique locally made and marketed products of each Thai tambon all over Thailand. It encourages village communities to improve local product quality and marketing, selecting one superior product from each tambon to receive formal branding as a "starred OTOP product", and provides a local and international stage for the promotion of these products. OTOP products cover a large array of local products, including handicrafts, cotton and silk garments, pottery, fashion accessories, household items, and foods.
- 99. While the OTOP project aims to increase village incomes, the government also offers a choice -- to go into OTOP production full time with plenty of government assistance. Major government agencies provide support: the Interior Ministry's Department of Community Development works directly with the villages to fine tune their products; the Industry's Ministry's Department of Industrial Promotion plays a key role in product development, skills training and quality control; the DEP's Product Development Centre employs teams of designers to work with villagers to create marketable designs and packages for their products.
- 100. **Gender Strategy.** Women are not usually enumerated as heads of households unless they are either living alone or there are no adult men in the households as in the case of those interviewed during the SES. Within the project sites, about 12% of AHs are female headed. At the national level, the statistics indicate that only about 24% of Thai households are headed by women, and over half of the women household heads are widowed. Among health indicators on communicable diseases in 2012, the most reported within the four provinces are dengue hemorrhagic fever and other mosquito borne viral hemorrhagic fever (2.2%), viral hepatitis (2.8%), human immunodeficiency virus (HIV) diseases (4.3%), and malaria 3.9%). The statistics are not at the alert levels, though HIV is highest at 4.3%.
- 101. The following specific actions seek to address gender issues as well as for other vulnerable sectors in this subproject:
  - (i) Women, the elderly, and disabled will be invited to/represented in consultations during RP implementation;
  - (ii) In conducting the Detailed Measurement Survey and consultations on resettlement activities, both women and men will participate in the discussions to include the elderly and disabled (may be by representation);
  - (iii) Women will be given equal chance in getting hired for unskilled work and receive equal remuneration for the same work by the men.
  - (iv) Women, the elderly, and disabled will be prioritized in livelihood support programs to be provided during RP implementation specifically as vulnerable/severely AH heads.

\_

<sup>&</sup>lt;sup>1</sup> https://www.thaiembassy.sg/friends-of-thailand/p/what-is-otop

- (v) Disaggregated monitoring indicators by gender and vulnerable groups will be developed for monitoring social benefits, economic opportunities, livelihood, and other resettlement activities.
- (vi) Operationalization of a HIV/AIDS and human trafficking awareness and prevention program.

#### C. Relocation of Businesses

- 102. The DOH and the civil works contractor will spearhead the dismantling, reconstruction and/or transferring of affected shops to areas outside of the ROW at no cost to the affected people. Any damaged and non-reusable building materials will be replaced, as necessary, with new ones.
- 103. Shop owners will be assisted by the DOH through the contractor in systematically dismantling and setting up their stores in the new location and in a way that will allow them to gradually phase out their operation in their old place and gradually begin their operation in their new place. Under this arrangement, the shop owners, whose business caters to road users, will not experience any stoppage in their operation more than the minimum disruption occurring in a typical road-widening project. Therefore, the livelihood of these shop owners will not be severely affected by the road-widening Project. The vendors will be informed about the start of civil works in a specific section at least 3 months in advance by the Project Engineer in consultation with the Resettlement and Grievance Redress Working Group (RGRWG).

#### **D. Temporary Impacts**

104. To ensure that temporary impacts during construction will be avoided, if not minimized, the contract for civil works will include the following provisions: (a) contractor together with DOH shall assist the AH seek for alternate productive areas outside the ROW; (b) to the extent possible, only DOH property or unused land will be used as construction work space to avoid disruption to households and business establishments; and (c) temporary use of land will be restored or improved. The DOH sub-district, assisted by the CSC, shall ensure proper monitoring and compliance with the Project resettlement policy. Said monitoring will be included in the semi-annual progress reports of the DOH Project Management Unit (PMU) to be submitted to DOH and the ADB.

#### E. Unanticipated Impacts

105. Should unanticipated involuntary resettlement impacts emerge during project implementation, DOH shall ensure the conduct of a social assessment and update or formulate a new RP depending on the extent of the impact changes. Unanticipated impacts will be documented and mitigated based on the principles provided in this RP. New APs that will be identified (i.e., those who will be included among the adversely affected because of changes in Project design or alignment prior to or even during construction works) are entitled to the same entitlements as those of the other APs. The aforementioned new APs will not include any occupants entering the construction area after the cut-off date of 08 May 2017. DOH shall submit these documents to ADB for disclosure on ADB's and DOH website and convey relevant information in them to the affected persons/community.

### VIII. Resettlement Budget and Financing Plan

- 106. Funds for implementing the RP are part of the Project budget. Costs are estimated based on the results of the IOL and prevailing rates as of April 2017.
- 107. Since the civil works contractor will spearhead the dismantling/rebuilding and/or transfer of all structures, including the preparation of sites on which affected shops could transfer as mentioned in preceding sections, funds for resettlement will be provided by DOH for community infrastructure. Said community infrastructure includes construction of pedestrian overpasses, guard rails in populated villages, landscaping, among others. The civil works contractor will draw from the budget for community infrastructure as per approved scope of work and based on bill of quantities of actual work done and expenses incurred.
- 108. The funds for resettlement under community infrastructure is based on the estimated cost of moving the affected shops and other structures, inclusive of fuel for carrying out the transfer of the same to their new sites. Based on existing Thai laws, valuation of shops is determined by the sum of dismantling cost, depreciation of materials, transportation, design, and construction to rebuild with f factor). For simple structures, such as roof over pole, the value is taken from the total of dismantling cost, transportation and cost to rebuild. Considerations are made on the following:
  - (i) Dismantle cost labour can handle 25 sqm/day
  - (ii) Transportation lump sum of 500 baht within a kilometer from original location
  - (iii) Rebuild labour can handle 15 sqm/day
  - (iv) Dismantling, transport, and construction can be done within a day, or within a week at the most. Therefore, the impact of opportunity to use the structure is minimal.
  - (v) The impact is considered temporary as AHs can continue their activities immediately after reconstruction, within 2 hours.
- 109. Loss of paddy fields will be addressed under the livelihood assistance support program for the project to be initiated with local governments under its One Tambon One Product Program (Para 98-99).
- 110. The cost estimated for in-kind assistance/restoration measures for the two roads is therefore estimated at **THB 294,840.00** (approximately **US\$ 8,479.69**). This amount includes the costs for dismantling, transferring, and rebuilding affected shops; operational/administrative expenses, and contingencies. It is understood that assistance to AHs will be in-kind and that no cash assistance will be provided to AHs.

Table 25. Summary of Resettlement Costs

| Budget Items                              | Budget in THB                               | Budget in USD |  |  |  |
|---|---|---------------|--|--|--|
| I. ASSISTANCE FOR RELOCATION OF SHOPS     | 226,800.00                                  | 6,557.45      |  |  |  |
|   | To be linked with loca                      |               |  |  |  |
| II. LIVELIHOOD ASSISTANCE SUPPORT PROGRAM | initiatives and funding (Refer to Paras 97- |               |  |  |  |
|   | 99 above) as facilitated by DOH             |               |  |  |  |
| ADMINISTRATIVE COSTS (15%)                | 34,020.00                                   | 938.62        |  |  |  |
| Total                                     | 260,820.00                                  | 7,541.07      |  |  |  |
| Cost contingencies (15% of direct costs)  | 34,020.00                                   | 938.62        |  |  |  |
| GRAND TOTAL                               | 294,840.00                                  | 8,479.69      |  |  |  |

#### IX. Institutional Arrangements

#### A. Implementation Arrangements

#### 1. National Level

- 111. **Department of Highways (DOH)**. The DOH is the Executing Agency (EA). It is therefore over-all responsible for the successful planning and implementation of the RP. DOH at the national level will be the oversight for the implementing agency, the Bureau of International Highways Cooperation (BIHC). Under the Bureau, a Project Management Unit (PMU) will be established to which the Construction Supervision Consultants (CSC) is attached. A Resettlement Specialist will be hired through the CSC to assist the PMU in the day to day implementation of the RP.
- 112. Specifically, the DOH through the PMU as attached to BIHC, shall:
  - (i) Provide overall management and coordination of RP implementation;
  - (ii) Liaise with regional DOH offices to ensure compliance with loan covenants in particular as regards social safeguards;
  - (iii) Update RP after DMS;
  - (iv) Supervise and ensure timely internal monitoring;
  - (v) Coordinate with ADB to engage resettlement consultant services for the project;
  - (vi) Actively participate in the updating and implementation of social safeguards activities in collaboration with the concerned entities at the regional/ provincial/ district levels:
  - (vii) Take the lead in the public disclosure of the Project RP and its salient features and participate in project information dissemination and holding of consultation meetings with AHs and other stakeholders;
  - (viii) Monitor grievances related to the project and call the attention of concerned government offices where complaints have remained outstanding beyond prescribed action periods;
  - (ix) Design and implement an internal monitoring system that shall capture the overall progress of the RP updating and implementation; and prepare semiannual progress reports for submission to ADB;
- 113. DOH shall ensure that: (i) any involuntary resettlement is carried out in accordance with this agreed RP, *ADB's Safeguard Policy Statement (2009)*, and Thai national laws and regulations on involuntary resettlement; (ii) adequate resources are made available for the implementation of this RP; (iii) the RP is implemented effectively and in a timely manner; (iv) the Works contractors shall assist DOH in the resettlement activities and do not commence construction work in a particular geographic area until the APs in that area are assisted in accordance with this RP; and (v) monitoring of the resettlement activities is carried out and related reports are prepared and submitted to ADB semi-annually and uploaded onto the DOH website.
- 114. **Construction Supervision Consultants (CSC).** The CSC will provide technical advice in the implementation of the approved updated RP. It will likewise provide capacity-building orientation and skills training to concerned personnel of the PMU, the DOH district and sub-district offices.

- 115. Together with the DOH, the CSC will supervise construction activities to ensure that the contractors adhere with the terms of their contract relative to avoiding and/or minimizing resettlement impacts, in addition to ensuring that contractors provide the necessary in-kind assistance/restoration measures to the APs prior to and/or during construction activities.
- 116. The CSC will have one international resettlement specialist (6 months, intermittent) and one national resettlement specialist (12 months, intermittent).

#### 2. Site Level

- 117. **DOH Sub-District Office**. The key arm of the DOH on the field is the sub-district office. The key responsibilities of the DOH Sub-district Offices in connection with resettlement planning and implementation are: (i) Facilitate the conduct of the DMS; and (ii) Assist the Project Engineer in coordinating and liasing with the village head for establishing the Resettlement and Grievance Redress Working Group (RGRWG).
- 118. For the DOH sub-district office to be able to carry out the aforementioned, its personnel will be provided the needed social safeguards orientation and training, including guidance, by the CSC.
- 119. **Project Engineer**. The Project Engineer is the key entity assisting the DOH Sub-District Office as regards resettlement planning and implementation. Specifically, the tasks are: (i) In consultation with the RGWRG to; a) facilitate a sustained public information campaign, ensuring that the public, especially the APs, are updated on any developments regarding the Project and resettlement activities, b) spearhead the distribution of information leaflets and the posting in village and local government sub-district offices of the RP and its updated and approved versions, c) the selection and preparation of new sites for the affected shops, and d) resolution of complaints and grievance of the APs in accordance with the Project resettlement policy; (ii) Maintain a record of all public meetings, grievances, and actions taken to address complaints and grievances; (iii) Supervise civil works activities and ensure that contractors adhere with their contract relative to avoiding and/or minimizing resettlement impacts, in addition to ensuring that contractors provide the necessary in-kind assistance/restoration measures to APs prior to and/or during construction activities.
- 120. **Resettlement Grievance Redress Working Group (RGRWG)**. An ad hoc body, the RGRWG, shall be set up by the 4<sup>th</sup> quarter of 2017. Each of the DOH sub-district offices in the 2 project roads shall assist in setting up their respective RGRWG. Each RGRWG shall be composed of a representative of the Village (headman/ natural leader/ elder/ women union), Project Engineer, and a representative of the civil works contractor once they are on board. The functions of the working group is to provide advice for the Project Engineer on the following matters:
  - (i) Planning out the orderly and systematic removal and/or transfer of obstructions in a particular segment or section of the ROW in a manner that will ensure the smooth implementation of civil works and at the same time ensure that roadside shop owners are able to continue with their livelihood with the least possible disruption in business operation and that other AHs are provided sufficient time to harvest their crops and/or remove their structures from the ROW.
  - (ii) Assisting in the selection of new sites on which the affected shops could rebuild.
  - (iii) Assisting in information dissemination regarding the Project and in the conduct of public meetings and consultations; provides orientation to stakeholders i.e.

- local District Highway staffs, contractors, workers, villagers, affected household; about the resettlement, GRM, and its role and functions.
- (iv) Providing input and comments to seek solution for complaints and grievances within the legal framework, cultural practice etc.

#### B. Implementation Schedule of the RP and RP Updating

121. Table 26 summarizes the various inter-related activities connected with the updating and implementation of the RP.

| Table 26. Indicative Scl | hedule of | Resettlement | Activities |
|--------------------------|-----------|--------------|------------|
|--------------------------|-----------|--------------|------------|

| Activities  | Schedule                      |
|---|-------------------------------|
| Preparation of Draft RP                                 | June 2017                     |
| Distribution of Project information leaflet             | June 2017 onward              |
| DOH concurrence of draft RP; ADB approval of draft RP   | June 2017                     |
| RP updating   | 3 <sup>rd</sup> Quarter 2017  |
| Submission to and ADB concurrence of updated RP         | 3 <sup>rd</sup> Quarter 2017  |
| Set up RGRWG  | 4 <sup>th</sup> Quarter 2017  |
| Provision of assistance to AHs                          | Before commencement of civil  |
| Implementation of Livelihood Assistance Support Program | works                         |
| Internal monitoring (submission of semi-annual reports) | Ongoing during implementation |

122. This Draft RP will be updated within the 3<sup>rd</sup> quarter of 2017 when all details for engineering design are made available prior to start of civil works. The update shall include verification of construction works and phases that eventually define temporary impacts, validation of AHs and/or identification of additional AH, and finalization of packaging for the livelihood assistance support to the vulnerably and severely AHs.

# X. Monitoring and Reporting

#### A. Monitoring Arrangements

- 123. The implementation of resettlement will be monitored regularly to help ensure that the RP is implemented as planned and that in-kind assistance and various mitigation measures designed to address adverse social impacts are adequate and effective.
- 124. The PMU, though its social unit, will serve as the Project's internal monitoring body. As such, the PMU will maintain a file of all data gathered in the field, including a data base on the affected households. The PMU will submit quarterly monitoring report to DOH starting from the commencement of RP updating. The DOH in turn will include updates on resettlement in its regular Project reports to ADB. Social monitoring reports will be made available to the AHs and will be submitted to ADB for web posting.
- 125. The role of monitoring and evaluation is to assess (i) compliance with the approved RP; (ii) the adequacy and judicious use of resources in the implementation of the RP; and (iii) whether or not resettlement activities are carried out as scheduled. In the event that problems are identified relative to the aforementioned, remedial measures will be suggested.
- 126. Specifically, internal monitoring and supervision will focus on the following objectives: (i) The AHs are able to continue with their present livelihood with no, or with minimum,

disruption; (ii) Public information, public consultation and grievance redress procedures are followed as described in the approved RP; and (iii) The transition between AP assistance and commencement of civil works is smooth and that sites are not handed over for civil works until the AHs have been satisfactorily assisted.

#### **B. Monitoring Indicators**

127. Monitoring indicators address the specific contents of the RP activities and entitlements matrix. Potential monitoring indicators, from which specific indicators can be developed and refined as applicable to the pertinent social safeguard planning document, are set out in Table 27.

Table 27. Suggested Monitoring Parameters and Indicators

| Monitoring parameters       | Suggested Monitoring Parameters and indicators  |  |  |  |  |  |  |
|-----------------------------|---|--|--|--|--|--|--|
|                             | RESETTLEMENT  |  |  |  |  |  |  |
| Consultation and Grievances | Consultations organized as scheduled including meetings, groups, and community activities.                                      |  |  |  |  |  |  |
|                             | Knowledge of entitlements by the APs (includes women and other vulnerable groups).  |  |  |  |  |  |  |
|                             | Use of the grievance redress mechanism by the APs.  |  |  |  |  |  |  |
|                             | Information on the resolution of the grievances.  |  |  |  |  |  |  |
| Communications and          | Number of general meetings.   |  |  |  |  |  |  |
| Participation               | Percentage of women out of total participants.  |  |  |  |  |  |  |
|                             | Number of meetings exclusively with women.  |  |  |  |  |  |  |
|                             | Number of meetings exclusively with vulnerable groups.  |  |  |  |  |  |  |
|                             | Level and adequacy of information communicated.   |  |  |  |  |  |  |
|                             | Materials/strategies used for information disclosures.  |  |  |  |  |  |  |
|                             | Translation of information disclosed in the local languages.  |  |  |  |  |  |  |
| Delivery of<br>Entitlements | Entitlements extended, compared with number and category of losses set out in the entitlement matrix.                           |  |  |  |  |  |  |
|                             | Identification of APs losing land temporarily, e.g. through soil disposal, borrow pits, contractors' camps, have been included. |  |  |  |  |  |  |
|                             | Timely delivery of assistance to transport structural materials according to schedule.  |  |  |  |  |  |  |
|                             | Progress on livelihood support activities being implemented as set out in the livelihood support plan.                          |  |  |  |  |  |  |

| Monitoring parameters | Suggested indicators  |
|-----------------------|---|
| Budget and Time       | Social safeguards staff appointed and mobilized on schedule for field and   |
| Frame                 | office work.  |
|                       | Capacity building and training activities completed on schedule.  |
|                       | Achieving resettlement implementation activities against the agreed implementation plan.                          |
|                       | Funds allocation for resettlement-to-resettlement entities on time.   |
|                       | Funds disbursement according to the RP.   |
|                       | Social preparation phase as per schedule.   |
|                       | Assistance extended in time for land clearing.  |
| Livelihood Support    | Number of APs under the livelihood support programs.  |
|                       | Number of APs by livelihood support program.  |
|                       | Number of new employment activities.  |
|                       | Degree of AP satisfaction with support received for livelihood programs.  |
| Benefit Monitoring    | Noticeable changes in patterns of occupation, production, and resource use compared to the pre-project situation. |
|                       | Noticeable changes in income and expenditure patterns compared to the pre-<br>project situation.                  |
|                       | Changes in cost of living compared to the pre-project situation.  |
|                       | Changes in key social and cultural parameters relating to living standards.                                       |
|                       | Changes occurred on customary communities and other vulnerable groups benefiting from the project.                |

#### C. Reporting and Disclosure

- 128. PMU through the social safeguards specialist will generate the data for a consolidated semiannual monitoring report to be submitted to ADB. PMU is tasked for the consolidation and preparation of the full Internal Monitoring Report (IMR) with the assistance of the CSC. Monitoring reports are subject to review by ADB and posted on the ADB and project websites for disclosure purposes.
- 129. Monitoring results shall be disclosed to the sites specifically to the affected communities/ persons in summary form status of the RP and corrective action plans, if any. Community disclosures will be in the language commonly understood by the AHs and posted at a location commonly agreed with AHs and village leaders.

# **Appendix 1. IOL and SES Dummy Tables**

Details of Affected Shops, NH 23

|                               | Te                | emporary Material  | <b>s</b> <sup>3</sup>                  | Semi-permanent Materials <sup>4</sup> |                    |  |  |  |
|-------------------------------|-------------------|--------------------|--|---------------------------------------|--------------------|--|--|--|
| Sub-district                  | Number<br>(Count) | Floor Area<br>(m²) | Estimated<br>Replacement<br>Cost (THB) | Number<br>(Count)                     | Floor Area<br>(m²) | Estimated<br>Replacement<br>Cost (THB) |  |  |
| Niwet <sup>1</sup>            |                   |                    |  |                                       |                    |  |  |  |
| Um Mao <sup>1</sup>           |                   |                    |  |                                       |                    |  |  |  |
| Phaisan <sup>1</sup>          |                   |                    |  |                                       |                    |  |  |  |
| Thung Khao Luang <sup>1</sup> |                   |                    |  |                                       |                    |  |  |  |
| Maba <sup>1</sup>             |                   |                    |  |                                       |                    |  |  |  |
| Klang <sup>1</sup>            |                   |                    |  |                                       |                    |  |  |  |
| Khwan Meaung <sup>2</sup>     |                   |                    |  |                                       |                    |  |  |  |
| Khwao <sup>2</sup>            |                   |                    |  |                                       |                    |  |  |  |
| Doet <sup>2</sup>             |                   |                    |  |                                       |                    |  |  |  |
| Du Thung <sup>2</sup>         |                   |                    |  |                                       |                    |  |  |  |
| Samran <sup>2</sup>           |                   |                    |  |                                       |                    |  |  |  |
| Total                         |                   |                    |  |                                       |                    |  |  |  |

NOTES: 1Under Roi Et DOH District Office

<sup>2</sup>Under Yasothon DOH District Office

<sup>3</sup>Wooden posts and roofs of leaves, grass, or tin sheets

#### Details of Affected Paddies in the ROW, NH 23

| Sub-district                  | Number (Count) | Area (m²) |
|-------------------------------|----------------|-----------|
| Niwet <sup>1</sup>            |                |           |
| Um Mao <sup>1</sup>           |                |           |
| Phaisan <sup>1</sup>          |                |           |
| Thung Khao Luang <sup>1</sup> |                |           |
| Maba <sup>1</sup>             |                |           |
| Klang <sup>1</sup>            |                |           |
| Khwan Meaung <sup>2</sup>     |                |           |
| Khwao <sup>2</sup>            |                |           |
| Doet <sup>2</sup>             |                |           |
| Du Thung <sup>2</sup>         |                |           |
| Samran <sup>2</sup>           |                |           |
| Total                         |                |           |

NOTES: <sup>1</sup>Under Roi Et DOH District Office
<sup>2</sup>Under Yasothon DOH District Office

#### Basic Social Information on AH Heads, NH 23

|                      |           |                 | Dasic           | Juciai  | 1111011      | nation    |           | i icaus               | , INI I Z | 5                  |             |     |       |
|----------------------|-----------|-----------------|-----------------|---------|--------------|-----------|-----------|-----------------------|-----------|--------------------|-------------|-----|-------|
| Gender of AH<br>Head |           | Age Bracket     |                 |         | Civil Status |           |           | Physical<br>Condition |           | Ethnic Affiliation |             |     |       |
|                      | < 50 yrs. | 50 ~ 59<br>yrs. | 60 yrs. & above | Married | Single       | Widow     | Divorced  | Normal                | Disabled  | Thai               | Phu<br>Thai | Lao | Khmer |
|                      |           |                 |                 |         | Ni           | wet Sub-d | istrict1  |                       |           |                    |             |     |       |
| Male                 |           |                 |                 |         |              |           |           |                       |           |                    |             |     |       |
| Female               |           |                 |                 |         |              |           |           |                       |           |                    |             |     |       |
| Total                |           |                 |                 |         |              |           |           |                       |           |                    |             |     |       |
|                      |           |                 |                 |         | Um           | Mao Sub-  | district1 |                       |           |                    |             |     |       |
| Male                 |           |                 |                 |         |              |           |           |                       |           |                    |             |     |       |
| Female               |           |                 |                 |         |              |           |           |                       |           |                    |             |     |       |
| Total                |           |                 |                 |         |              |           |           |                       |           |                    |             |     |       |

<sup>&</sup>lt;sup>4</sup>Combination of wooden, concrete, and steel materials

| Gender of AH                      | Age Bracket |                 |                 | Civil Status |          |           | Physical<br>Condition  |          | Ethnic Affiliation |      |             |          |  |
|-----------------------------------|-------------|-----------------|-----------------|--------------|----------|-----------|------------------------|----------|--------------------|------|-------------|----------|--|
| Head                              | < 50 yrs.   | 50 ~ 59<br>yrs. | 60 yrs. & above | Married      | Single   | Widow     | Divorced               | Normal   | Disabled           | Thai | Phu<br>Thai | Lao      | Khmer  |
| Phaisan Sub-district <sup>1</sup> |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Male                              |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Female                            |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Total                             |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
|                                   |             |                 |                 |              | Thung KI | hao Luang | Sub-distri             | ict¹     |                    |      |             |          |  |
| Male                              |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Female                            |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Total                             |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
|                                   |             |                 |                 |              | Ma       | aba Sub-d | istrict1               |          |                    |      |             |          |  |
| Male                              |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Female                            |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Total                             |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
|                                   |             |                 |                 |              | Kl       | ang Sub-d | listrict1              |          |                    |      |             |          |  |
| Male                              |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Female                            |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Total                             |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
|                                   |             |                 |                 |              | Khwan    | Meaung S  | Sub-district           | 2        |                    |      |             | ı        |  |
| Male                              |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Female                            |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Total                             |             |                 |                 |              |          | L         |                        |          |                    |      |             |          |  |
|                                   |             | 1               | 1               |              | Kh       | wao Sub-  | district <sup>2</sup>  | 1        |                    |      | 1           | 1        |  |
| Male                              |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Female                            |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Total                             |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
|                                   |             | 1               | 1               |              | D        | oet Sub-d | istrict <sup>2</sup>   | 1        |                    |      |             | 1        |  |
| Male                              |             |                 |                 |              |          |           |                        |          |                    |      |             |          |  |
| Female                            | -           |                 |                 |              |          |           |                        |          |                    |      |             |          | <del>                                     </del> |
| Total                             | I .         | İ               |                 |              | D.: 7    | ha. Cl    | diatriat?              | j        | <u>I</u>           |      |             | Ì        | ь Н  |
| Mala                              | 1           | 1               | ı               |              | ו שע     | hung Sub  | -uistrict <sup>2</sup> | 1        |                    |      | 1           | 1        |  |
| Male                              | 1           |                 |                 |              |          |           |                        |          |                    |      |             |          | -  |
| Female<br>Total                   | 1           |                 |                 |              |          |           |                        |          |                    |      |             |          | -  |
| lotai                             | <u> </u>    | <u> </u>        |                 |              | C        | nran Sub- | diatriat?              | <u> </u> |                    |      |             | <u> </u> |  |
| Male                              |             | 1               | <u> </u>        |              | Sar      | man sub-  | uistrict*              | 1        |                    |      |             | 1        |  |
| Female                            | -           |                 |                 |              |          |           |                        |          |                    |      |             |          | +  |
| Total                             | -           |                 |                 |              |          |           |                        |          |                    |      |             |          | +  |
| GRAND TOTAL                       | 1           |                 |                 |              |          |           |                        |          | <del> </del>       |      |             |          | +  |
| NOTEO 111 1                       | L           | L               |                 |              |          | <u> </u>  | <u> </u>               |          | L                  |      |             | L        |  |

NOTES: <sup>1</sup>Under Roi Et DOH District Office <sup>2</sup>Under Yasothon DOH District Office

Religious Affiliation and Educational Attainment of AH Heads, NH23

|                      |          |           | ous Affiliation |           |                    |             |       |       | al Backgro |            |         |
|----------------------|----------|-----------|-----------------|-----------|--------------------|-------------|-------|-------|------------|------------|---------|
| Gender of AH<br>Head | Buddhist | Christian | Muslim          | Hindu     | Native<br>(Spirit) | None        | P1-P6 | M1-M3 | M4-M6      | Vocational | College |
|                      |          |           |                 | Niwe      | t Sub-dist         | rict1       |       |       |            |            |         |
| Male                 |          |           |                 |           |                    |             |       |       |            |            |         |
| Female               |          |           |                 |           |                    |             |       |       |            |            |         |
| Total                |          |           |                 |           |                    |             |       |       |            |            |         |
|                      |          |           |                 | Um Ma     | ao Sub-dis         | trict1      |       |       |            |            |         |
| Male                 |          |           |                 |           |                    |             |       |       |            |            |         |
| Female               |          |           |                 |           |                    |             |       |       |            |            |         |
| Total                |          |           |                 |           |                    |             |       |       |            |            |         |
|                      |          |           |                 | Phaisa    | an Sub-dis         | trict1      |       |       |            |            |         |
| Male                 |          |           |                 |           |                    |             |       |       |            |            |         |
| Female               |          |           |                 |           |                    |             |       |       |            |            |         |
| Total                |          |           |                 |           |                    |             |       |       |            |            |         |
|                      |          |           | Т               | hung Khad | Luang S            | ub-district | 1     |       |            |            |         |
| Male                 |          |           |                 |           |                    |             |       |       |            |            |         |
| Female               |          |           |                 |           |                    |             |       |       |            |            |         |
| Total                |          |           |                 |           |                    |             |       |       |            |            |         |
|                      | •        |           |                 | Maba      | Sub-dist           | rict1       | •     |       |            |            | •       |
| Male                 |          |           |                 |           |                    |             |       |       |            |            |         |

| Gender of AH |          | Religio   | ous Affiliatio | n        |                    |                        |       | Education | al Backgrou | und        |         |
|--------------|----------|-----------|----------------|----------|--------------------|------------------------|-------|-----------|-------------|------------|---------|
| Head         | Buddhist | Christian | Muslim         | Hindu    | Native<br>(Spirit) | None                   | P1-P6 | M1-M3     | M4-M6       | Vocational | College |
| Female       |          |           |                |          |                    |                        |       |           |             |            |         |
| Total        |          |           |                |          |                    |                        |       |           |             |            |         |
|              |          |           |                | Klang    | Sub-dist           | rict1                  |       |           |             |            |         |
| Male         |          |           |                |          |                    |                        |       |           |             |            |         |
| Female       |          |           |                |          |                    |                        |       |           |             |            |         |
| Total        |          |           |                |          |                    |                        |       |           |             |            |         |
|              |          |           |                | Khwan Me | eaung Sub          | -district <sup>2</sup> |       |           |             |            |         |
| Male         |          |           |                |          |                    |                        |       |           |             |            |         |
| Female       |          |           |                |          |                    |                        |       |           |             |            |         |
| Total        |          |           |                |          |                    |                        |       |           |             |            |         |
|              |          |           |                | Khwa     | o Sub-dist         | trict <sup>2</sup>     |       |           |             |            |         |
| Male         |          |           |                |          |                    |                        |       |           |             |            |         |
| Female       |          |           |                |          |                    |                        |       |           |             |            |         |
| Total        |          |           |                |          |                    |                        |       |           |             |            |         |
|              |          |           |                | Doet     | Sub-distr          | rict <sup>2</sup>      |       |           |             |            |         |
| Male         |          |           |                |          |                    |                        |       |           |             |            |         |
| Female       |          |           |                |          |                    |                        |       |           |             |            |         |
| Total        |          |           |                |          |                    |                        |       |           |             |            |         |
|              |          |           |                | Du Thu   | ng Sub-di          | strict <sup>2</sup>    |       |           |             |            |         |
| Male         |          |           |                |          |                    |                        |       |           |             |            |         |
| Female       |          |           |                |          |                    |                        |       |           |             |            |         |
| Total        |          |           |                |          |                    |                        |       |           |             |            |         |
|              |          |           |                | Samra    | ın Sub-dis         | trict <sup>2</sup>     |       |           |             |            |         |
| Male         |          |           |                |          |                    |                        |       |           |             | , <u>-</u> |         |
| Female       |          |           |                |          |                    |                        |       |           |             |            |         |
| Total        |          |           |                |          |                    |                        |       |           |             |            |         |
| GRAND TOTAL  |          |           |                |          |                    |                        |       |           |             |            |         |

NOTES: <sup>1</sup>Under Roi Et DOH District Office <sup>2</sup>Under Yasothon DOH District Office

# Household Size and Income, NH23

|              |     |                      |                 | 1 10    | accinoic            | J SIZE allu               | 11100     | 1110, 1         | 11 120  |                     |                           |                |         |
|--------------|-----|----------------------|-----------------|---------|---------------------|---------------------------|-----------|-----------------|---------|---------------------|---------------------------|----------------|---------|
| Gender of AH | Nur | mber of<br>living ir | Persons<br>n AH |         | Primary So          | urce of Income o          | f AH      |                 |         | Secondary           | Source of Incom           | e of AH        |         |
| Head         | 1~4 |                      | 9 & more        | Farming | Roadside<br>Selling | Private/Gov't<br>Employee | Labor     | Pension         | Farming | Roadside<br>Selling | Private/Gov't<br>Employee | Hired<br>Labor | Pension |
|              |     |                      |                 |         |                     | Niwet Sub-dis             | strict1   |                 |         |                     |                           |                |         |
| Male         |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Female       |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Total        |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
|              |     |                      |                 |         |                     | Um Mao Sub-d              | listrict1 |                 |         |                     |                           |                |         |
| Male         |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Female       |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Total        |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
|              |     |                      |                 |         |                     | Phaisan Sub-d             | listrict1 |                 |         |                     |                           |                |         |
| Male         |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Female       |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Total        |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
|              |     |                      |                 |         | Thur                | ng Khao Luang             | Sub-dis   | trict1          |         |                     |                           |                |         |
| Male         |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Female       |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Total        |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
|              |     |                      |                 |         |                     | Maba Sub-dis              | strict1   |                 |         |                     |                           |                |         |
| Male         |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Female       |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Total        |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
|              |     |                      |                 |         |                     | Klang Sub-dis             | strict1   |                 |         |                     |                           |                |         |
| Male         |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Female       |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
| Total        |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |
|              |     |                      |                 |         | Kh                  | wan Meaung Su             | ıb-distri | ct <sup>2</sup> |         |                     |                           |                |         |
| Male         |     |                      |                 |         |                     |                           |           |                 |         |                     |                           |                |         |

40

| Gender of AH | Nu  | mber of<br>living i | Persons<br>n AH |         | Primary So          | urce of Income o          | f AH                  |         |         | Secondary           | Source of Incom           | e of AH        |         |
|--------------|-----|---------------------|-----------------|---------|---------------------|---------------------------|-----------------------|---------|---------|---------------------|---------------------------|----------------|---------|
| Head         | 1~4 | 5~8                 | 9 & more        | Farming | Roadside<br>Selling | Private/Gov't<br>Employee | Hired<br>Labor        | Pension | Farming | Roadside<br>Selling | Private/Gov't<br>Employee | Hired<br>Labor | Pension |
| Female       |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| Total        |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
|              |     |                     |                 |         |                     | Khwao Sub-di              | strict <sup>2</sup>   |         |         |                     |                           |                |         |
| Male         |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| Female       |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| Total        |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
|              |     |                     |                 |         |                     | Doet Sub-dis              | trict <sup>2</sup>    |         |         |                     |                           |                |         |
| Male         |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| Female       |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| Total        |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
|              |     |                     |                 |         |                     | Du Thung Sub-             | district <sup>2</sup> | !       |         |                     |                           |                |         |
| Male         |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| Female       |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| Total        |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
|              |     |                     |                 |         |                     | Samran Sub-d              | istrict <sup>2</sup>  |         |         |                     |                           |                |         |
| Male         |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| Female       |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| Total        |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |
| GRAND TOTAL  |     |                     |                 |         |                     |                           |                       |         |         |                     |                           |                |         |

Monthly Income and Expenses of AHs, NH23

|                   |          | Monthly Hous        | ehold Income |                           |             | Monthly House       | ehold Expenses |           |
|-------------------|----------|---------------------|--------------|---------------------------|-------------|---------------------|----------------|-----------|
| Gender of AH Head | 5,000 or | 5,001~              | 10,001~      |                           | 5,000 or    | 5,001~              | 10,001~        | 20,001 or |
|                   | Less     | 10,000 <sup>3</sup> | 20,000       | Higher                    | less        | 10,000 <sup>3</sup> | 20,000         | Higher    |
|                   |          |                     | Niwet        | Sub-district <sup>1</sup> |             |                     |                |           |
| Male              |          |                     |              |                           |             |                     |                |           |
| Female            |          |                     |              |                           |             |                     |                |           |
| Total             |          |                     |              |                           |             |                     |                |           |
|                   |          |                     | Um Mad       | Sub-district <sup>1</sup> |             |                     |                |           |
| Male              |          |                     |              |                           |             |                     |                |           |
| Female            |          |                     |              |                           |             |                     |                |           |
| Total             |          |                     |              |                           |             |                     |                |           |
|                   | 1        | 1                   | Phaisar      | Sub-district1             | 1           | 1                   | 1              | 1         |
| Male              |          |                     |              |                           |             |                     |                |           |
| Female            |          |                     |              |                           |             |                     |                |           |
| Total             |          |                     |              |                           |             |                     |                |           |
|                   | T        | T                   | Thung Khao   | Luang Sub-dist            | rict1       | T                   | ı              | 1         |
| Male              |          |                     |              |                           |             |                     |                |           |
| Female            |          |                     |              |                           |             |                     |                |           |
| Total             |          |                     | L            |                           |             |                     |                |           |
| Mala              | I        | 1                   | Maba         | Sub-district <sup>1</sup> | ı           | I                   | I              | ı         |
| Male              |          |                     |              |                           |             |                     |                |           |
| Female            |          |                     |              |                           |             |                     |                |           |
| Total             |          |                     | 1/1          | 0.1.1.1.1.1.1             |             |                     |                |           |
| M.I.              | I        | 1                   | Klang        | Sub-district <sup>1</sup> | ı           | I                   | I              | ı         |
| Male              |          |                     |              |                           |             |                     |                |           |
| Female Total      |          |                     |              |                           |             |                     |                |           |
| Iotai             |          |                     | Vhuen Mee    | l<br>ung Sub-distri       |             |                     |                |           |
| Male              | I        | 1                   | ranwan Mea   | iung Sub-uistri           | Մ <u>Լ*</u> | I                   | I              | Π         |
| Female            |          |                     |              |                           |             |                     |                |           |
| Total             |          |                     |              |                           |             |                     |                |           |
| IUlai             | <u> </u> | <u> </u>            | Khwaa        | Sub-district <sup>2</sup> |             | <u> </u>            | <u> </u>       |           |
| Male              | I        |                     | KIIWaU       | Jub-uistrict              |             | I                   | 1              |           |
| Female            |          |                     |              |                           |             |                     |                |           |
| Total             |          |                     |              |                           |             |                     |                |           |
| Total             | <u> </u> | 1                   | Doet 9       | Sub-district <sup>2</sup> | <u>l</u>    | <u> </u>            | <u> </u>       | <u>l</u>  |
| Male              |          | 1                   | DOE! (       | Jub-uigti lot             |             |                     |                |           |
| Female            |          |                     |              |                           |             |                     |                |           |
| Total             |          |                     |              |                           |             |                     |                |           |
| ı vui             | l        | l                   |              |                           | l           | <u> </u>            | l              | <u> </u>  |

| 10,001~<br>20,000<br>Du Thun | 20,001 or<br>Higher<br>g Sub-district <sup>2</sup> | 5,000 or<br>less                 | 5,001~<br>10,000 <sup>3</sup>    | 10,001~                          | 20,001 or                        |
|------------------------------|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| ,                            |  | less                             | 10 000 <sup>3</sup>              | 00 000                           |                                  |
| Du Thun                      | a Sub-dietrict2                                    |                                  | . 0,000                          | 20,000                           | Higher                           |
|                              | g oub-ulatilict                                    |                                  |                                  |                                  |                                  |
|                              |  |                                  |                                  |                                  |                                  |
|                              |  |                                  |                                  |                                  |                                  |
|                              |  |                                  |                                  |                                  |                                  |
| Samran                       | Sub-district <sup>2</sup>                          |                                  |                                  |                                  |                                  |
|                              |  |                                  |                                  |                                  |                                  |
|                              |  |                                  |                                  |                                  |                                  |
|                              |  |                                  |                                  |                                  |                                  |
|                              |  |                                  |                                  |                                  |                                  |
|                              | Samran   | Samran Sub-district <sup>2</sup> | Samran Sub-district <sup>2</sup> | Samran Sub-district <sup>2</sup> | Samran Sub-district <sup>2</sup> |

NOTES: <sup>1</sup>Under Roi Et DOH District Office

Health and Sanitation, NH23

|   |                  |                      |                  |     |                  | in and C             | - C.I. 11 CO. C. | J ,                  |                  |                 |             |      |      |      |                         |        |
|---|------------------|----------------------|------------------|-----|------------------|----------------------|------------------|----------------------|------------------|-----------------|-------------|------|------|------|-------------------------|--------|
| Gender of AH                            | Sou              | ırce of Drinki       |                  |     |                  | ource of Wat         |                  | ning                 |                  | t Facilities    |             |      | Ail  | ment | hold Comr<br>s the Past | Year   |
| Head                                    | Artesian<br>Well | Shallow<br>Open Well | Public<br>System | Buy | Artesian<br>Well | Shallow<br>Open Well | Public<br>System | Neighbor             | Water-<br>sealed | Squat<br>Toilet | Open<br>Pit | None | Cold | Flu  | Diarrhea                | Others |
|   |                  |                      | ,                |     |                  | Niwet S              | Sub-distric      | t <sup>1</sup>       |                  |                 |             |      |      |      |                         |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| . • • • • • • • • • • • • • • • • • • • |                  |                      |                  |     | Į                | Um Mao               | Sub-distri       | ct1                  |                  |                 |             |      |      |      | l l                     |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
|   |                  | Į.                   |                  |     | Į                | Phaisan              | Sub-distri       | ct <sup>1</sup>      |                  |                 | l           |      |      |      | <u> </u>                |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
|   |                  | I.                   |                  |     | Т                | hung Khao I          | uang Sub         | -district1           |                  |                 |             |      |      |      | 1                       |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
|   | •                |                      |                  |     |                  | Maba S               | Sub-distric      | t <sup>1</sup>       |                  |                 |             |      |      |      |                         |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
|   |                  |                      |                  |     |                  | Klang                | Sub-distric      | t¹                   |                  |                 |             |      |      |      |                         |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
|   |                  |                      |                  |     |                  | Khwan Mea            | ung Sub-d        | istrict <sup>2</sup> | ,                |                 |             |      |      |      |                         |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
|   |                  |                      |                  |     |                  | Khwao                | Sub-distric      | t <sup>2</sup>       |                  |                 |             |      |      |      |                         |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
|   |                  |                      |                  |     | 1                | Doet S               | ub-district      | 2                    |                  |                 |             |      |      |      |                         |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
|   | 1                | 1                    |                  |     | 1                | Du Thun              | g Sub-disti      | rict <sup>2</sup>    | , ,              |                 | 1           | 1    |      |      | ,                       |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Female                                  |                  |                      |                  |     |                  |                      |                  |                      |                  |                 |             |      |      |      |                         |        |
| Total                                   |                  |                      |                  |     |                  | 0                    | 0 1 11 11        | - 12                 |                  |                 | <u> </u>    |      |      |      |                         |        |
| Mala                                    |                  |                      |                  |     | 1                | Samran               | Sub-distri       | Ct+                  |                  |                 | 1           |      |      |      | l I                     |        |
| Male                                    |                  |                      |                  |     |                  |                      |                  |                      |                  |                 | <u> </u>    |      |      |      |                         |        |

<sup>&</sup>lt;sup>2</sup>Under Yasothon DOH District Office
<sup>3</sup>National poverty line in 2015 was THB 2,644 per month per person (National Economic and Social Development Board or NESDB), or the equivalent of THB 9,254 per month per household based on an average HH size of 3.5.

| Gender of AH | Sou              | urce of Drinki       | ing Water        |     | S                | ource of Wat         | ter for Wash     | ning     | Toilet Facilities at Home |                 |             |      | Household Common Ailments the Past Year |     |          |        |
|--------------|------------------|----------------------|------------------|-----|------------------|----------------------|------------------|----------|---------------------------|-----------------|-------------|------|---|-----|----------|--------|
| Head         | Artesian<br>Well | Shallow<br>Open Well | Public<br>System | Buy | Artesian<br>Well | Shallow<br>Open Well | Public<br>System | Neighbor | Water-<br>sealed          | Squat<br>Toilet | Open<br>Pit | None | Cold                                    | Flu | Diarrhea | Others |
| Female       |                  |                      |                  |     |                  |                      |                  |          |                           |                 |             |      |   |     |          |        |
| Total        |                  |                      |                  |     |                  |                      |                  |          |                           |                 |             |      |   |     |          |        |
| GRAND TOTAL  |                  |                      |                  |     |                  |                      |                  |          |                           |                 |             |      |   |     |          |        |

NOTES: <sup>1</sup>Under Roi Et DOH District Office <sup>2</sup>Under Yasothon DOH District Office

Source of Energy/Power for Lighting and Cooking, NH23

|                     | Source      | of Energy | y/Power to | or Lighting                 | g and Coo       | king, NH2 | 23         |          |
|---------------------|-------------|-----------|------------|-----------------------------|-----------------|-----------|------------|----------|
| Gender of AH Head   |             | Power fo  | r Lighting |                             |                 |           | or Cooking |          |
| Gender of Art Flead | Electricity | Kerosene  | Battery    | Firewood                    | Electricity     | LPG       | Charcoal   | Firewood |
|                     |             |           | Niwet      | Sub-district <sup>1</sup>   |                 |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Um Ma      | Sub-district1               |                 |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Phaisa     | n Sub-district1             |                 |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Thung Khao | Luang Sub-dis               | trict1          |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Maba       | Sub-district1               |                 |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Klang      | Sub-district <sup>1</sup>   |                 |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Khwan Mea  | ung Sub-distri              | ct <sup>2</sup> |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Khwao      | Sub-district <sup>2</sup>   |                 |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Doet       | Sub-district <sup>2</sup>   |                 |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Du Thur    | g Sub-district <sup>2</sup> |                 |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             | ]         |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
|                     |             |           | Samrai     | Sub-district <sup>2</sup>   |                 |           |            |          |
| Male                |             |           |            |                             |                 |           |            |          |
| Female              |             |           |            |                             |                 |           |            |          |
| Total               |             |           |            |                             |                 |           |            |          |
| GRAND TOTAL         |             |           |            |                             |                 |           |            |          |

NOTES: <sup>1</sup>Under Roi Et DOH District Office <sup>2</sup>Under Yasothon DOH District Office Ownership of Home Appliances, NH23

|                   |            |  | OW       |                 | of Home        | Appliance                 | J3, INI IZJ                                      |          |  | 14/ 11             |  |
|-------------------|------------|--|----------|-----------------|----------------|---------------------------|--|----------|--|--------------------|--|
| Gender of AH Head | Television | Radio/<br>Cassette                               | Phone    | Electric<br>Fan | Refrigerator   | Microwave                 | DVD Player                                       | Computer | Air<br>Conditioner                               | Washing<br>Machine | Oven/<br>Stove                                   |
|                   |            |  |          |                 | Niwet Sub-     | -district1                |  |          |  |                    |  |
| Male              |            |  |          |                 |                |                           |  |          |  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            |  |          |                 |                |                           |  |          |  |                    |  |
|                   |            |  |          |                 | Um Mao Su      | b-district1               |  |          |  |                    |  |
| Male              |            |  |          |                 |                |                           |  |          |  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            |  |          |                 |                |                           |  |          |  |                    |  |
|                   |            | 1  | 1        |                 | Phaisan Su     | b-district1               | 1  |          | 1  |                    |  |
| Male              |            |  |          |                 |                |                           |  |          |  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            |  |          | -               |                |                           |  |          |  |                    |  |
| Male              |            | 1  | <b>1</b> | II              | hung Khao Luar | ng Sub-district           |  |          |  |                    | 1  |
| rviale<br>Female  |            | <del>                                     </del> |          |                 |                |                           | <del>                                     </del> |          | <del>                                     </del> |                    | <del>                                     </del> |
| Total             |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            |  |          |                 | Maba Sub-      | diatriat1                 |  |          |  |                    |  |
| Male              |            |  | 1        |                 | Mada Sud-      | -aistrict                 | 1  |          | 1  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    | -  |
| Total             |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            | 1  |          |                 | Klang Sub      | _district1                |  |          |  |                    |  |
| Male              |            |  |          |                 | Rially Sub     | -uistrict                 |  |          |  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            |  |          |                 |                |                           |  |          |  |                    |  |
| 1000              |            |  | l        |                 | Khwan Meaung   | Sub-district <sup>2</sup> |  |          |  |                    |  |
| Male              |            |  |          |                 | Tanwan modang  | oub diodirot              |  |          |  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    | <u> </u>   |
| Total             |            |  |          |                 |                |                           |  |          |  |                    | 1  |
|                   |            |  | ı        |                 | Khwao Sub      | -district <sup>2</sup>    |  |          |  |                    |  |
| Male              |            |  |          |                 |                |                           |  |          |  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            |  |          |                 |                |                           |  |          |  |                    |  |
|                   |            |  |          |                 | Doet Sub-      | district <sup>2</sup>     |  |          |  |                    |  |
| Male              |            |  |          |                 |                |                           |  |          |  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            |  |          |                 |                |                           |  |          |  |                    |  |
|                   |            |  |          |                 | Du Thung Sเ    | ıb-district <sup>2</sup>  |  |          |  |                    |  |
| Male              |            |  |          |                 |                |                           |  |          |  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            |  |          |                 |                |                           |  |          |  |                    |  |
|                   |            | 1  |          |                 | Samran Sul     | o-district <sup>2</sup>   | ,  |          | ,  |                    |  |
| Male              |            |  |          |                 |                |                           |  |          |  |                    |  |
| Female            |            |  |          |                 |                |                           |  |          |  |                    |  |
| Total             |            |  |          |                 |                |                           |  |          |  |                    | igsquare   |
| GRAND TOTAL       |            | l  |          |                 |                |                           |  |          |  |                    |  |

NOTES: <sup>1</sup>Under Roi Et DOH District Office <sup>2</sup>Under Yasothon DOH District Office

Ownership of Means of Transportation

| Ownership of inears of transportation |     |           |                |                     |           |       |      |  |  |  |  |
|---------------------------------------|-----|-----------|----------------|---------------------|-----------|-------|------|--|--|--|--|
| Gender of AH Head                     | Car | Motorbike | Truck/Pick-up  | Bicycle             | Rot-itang | Other | None |  |  |  |  |
|                                       |     |           | Niwet Sub-dis  | trict1              |           |       |      |  |  |  |  |
| Male                                  |     |           |                |                     |           |       |      |  |  |  |  |
| Female                                |     |           |                |                     |           |       |      |  |  |  |  |
| Total                                 |     |           |                |                     |           |       |      |  |  |  |  |
|                                       |     |           | Um Mao Sub-di  | strict1             |           |       |      |  |  |  |  |
| Male                                  |     |           |                |                     |           |       |      |  |  |  |  |
| Female                                |     |           |                |                     |           |       |      |  |  |  |  |
| Total                                 |     |           |                |                     |           |       |      |  |  |  |  |
|                                       |     |           | Phaisan Sub-di | strict <sup>1</sup> |           |       |      |  |  |  |  |
| Male                                  |     |           |                |                     |           |       |      |  |  |  |  |
| Female                                |     |           |                |                     |           |       |      |  |  |  |  |

44

| Gender of AH Head | Car | Motorbike | Truck/Pick-up      | Bicycle                 | Rot-itang | Other | None |
|-------------------|-----|-----------|--------------------|-------------------------|-----------|-------|------|
| Total             |     |           |                    |                         |           |       |      |
|                   |     |           | Thung Khao Luang S | Sub-district1           |           |       |      |
| Male              |     |           |                    |                         |           |       |      |
| Female            |     |           |                    |                         |           |       |      |
| Total             |     |           |                    |                         |           |       |      |
|                   |     |           | Maba Sub-dis       | trict <sup>1</sup>      |           |       |      |
| Male              |     |           |                    |                         |           |       |      |
| Female            |     |           |                    |                         |           |       |      |
| Total             |     |           |                    |                         |           |       |      |
|                   |     |           | Klang Sub-dis      | trict1                  |           |       |      |
| Male              |     |           |                    |                         |           |       |      |
| Female            |     |           |                    |                         |           |       |      |
| Total             |     |           |                    |                         |           |       |      |
|                   |     |           | Khwan Meaung Su    | b-district <sup>2</sup> |           |       |      |
| Male              |     |           |                    |                         |           |       |      |
| Female            |     |           |                    |                         |           |       |      |
| Total             |     |           |                    |                         |           |       |      |
|                   |     |           | Khwao Sub-dis      | strict <sup>2</sup>     |           |       |      |
| Male              |     |           |                    |                         |           |       |      |
| Female            |     |           |                    |                         |           |       |      |
| Total             |     |           |                    |                         |           |       |      |
|                   |     |           | Doet Sub-dist      | trict <sup>2</sup>      |           |       |      |
| Male              |     |           |                    |                         |           |       |      |
| Female            |     |           |                    |                         |           |       |      |
| Total             |     |           |                    |                         |           |       |      |
|                   |     |           | Du Thung Sub-d     | listrict <sup>2</sup>   |           |       |      |
| Male              |     |           |                    |                         |           |       |      |
| Female            |     |           |                    |                         |           |       |      |
| Total             |     |           |                    |                         |           |       |      |
|                   |     |           | Samran Sub-di      | strict <sup>2</sup>     |           |       |      |
| Male              |     |           |                    |                         |           |       |      |
| Female            |     |           |                    |                         |           |       |      |
| Total             |     |           |                    |                         |           |       |      |
| GRAND TOTAL       |     |           |                    |                         |           |       |      |

NOTES: <sup>1</sup>Under Roi Et DOH District Office <sup>2</sup>Under Yasothon DOH District Office

Landholdings Outside of Road Right-of-Way

| Tenure Status                                  | Residential                     | Commercial    | Farmland | Pond | Forest |  |  |  |
|--|---------------------------------|---------------|----------|------|--------|--|--|--|
|  | Niwet Sub-district <sup>1</sup> |               |          |      |        |  |  |  |
| Title Deed (Chanot)                            | 1                               |               |          |      |        |  |  |  |
| Confirmed Certificate of Use (Nor Sor Sam Kor) |                                 |               |          |      |        |  |  |  |
| Certificate of Use (Nor Sor Sam)               |                                 |               |          |      |        |  |  |  |
| Certificate of Possession (Sor Kor Nung)       |                                 |               |          |      |        |  |  |  |
| Rent or Lease (chao teedin)                    |                                 |               |          |      |        |  |  |  |
| Total  |                                 |               |          |      |        |  |  |  |
|  | Um Mao S                        | Sub-district1 |          |      |        |  |  |  |
| Title Deed (Chanot)                            |                                 |               |          |      |        |  |  |  |
| Confirmed Certificate of Use (Nor Sor Sam Kor) |                                 |               |          |      |        |  |  |  |
| Certificate of Use (Nor Sor Sam)               |                                 |               |          |      |        |  |  |  |
| Certificate of Possession (Sor Kor Nung)       |                                 |               |          |      |        |  |  |  |
| Rent or Lease (chao teedin)                    |                                 |               |          |      |        |  |  |  |
| Total  |                                 |               |          |      |        |  |  |  |
|  | Phaisan S                       | Sub-district1 |          |      |        |  |  |  |
| Title Deed (Chanot)                            |                                 |               |          |      |        |  |  |  |
| Confirmed Certificate of Use (Nor Sor Sam Kor) |                                 |               |          |      |        |  |  |  |
| Certificate of Use (Nor Sor Sam)               |                                 |               |          |      |        |  |  |  |
| Certificate of Possession (Sor Kor Nung)       |                                 |               |          |      |        |  |  |  |
| Rent or Lease (chao teedin)                    |                                 |               |          |      |        |  |  |  |
| Total  |                                 |               |          |      |        |  |  |  |
|  | Thung Khao Luang Sub-district¹  |               |          |      |        |  |  |  |
| Title Deed (Chanot)                            |                                 |               |          |      |        |  |  |  |

45

| Tenure Status  | Residential  | Commercial                              | Farmland    | Pond    | Forest       |
|--|--------------|---|-------------|---------|--------------|
|  | 110010011001 | 0011111010101                           | 1 411114114 | . 0.1.4 | 1 0.000      |
| Confirmed Certificate of Use (Nor Sor Sam Kor)  Certificate of Use (Nor Sor Sam) |              |   |             |         |              |
| Certificate of Ose (Nor Sor Sam)  Certificate of Possession (Sor Kor Nung)       |              |   |             |         |              |
| Rent or Lease (chao teedin)  |              |   |             |         |              |
| ,  |              |   |             |         |              |
| Total  | Maha C       | b. diatriati                            |             |         |              |
| Title Deed (Charet)  | IVIADA S     | ub-district <sup>1</sup>                |             |         | 1            |
| Title Deed (Chanot) Confirmed Certificate of Use (Nor Sor Sam Kor)               |              |   |             |         |              |
| Certificate of Use (Nor Sor Sam Kor)   |              |   |             |         |              |
| Certificate of Ose (Nor Sor Sam)  Certificate of Possession (Sor Kor Nung)       |              |   |             |         |              |
| Rent or Lease (chao teedin)  |              |   |             |         |              |
| Total  |              |   |             |         |              |
| Total  | Viana S      | ub district1                            |             |         | 1            |
| Title Deed (Chanot)  | Rially 3     | ub-district1                            |             |         | T            |
| Confirmed Certificate of Use (Nor Sor Sam Kor)                                   |              |   |             |         |              |
| Certificate of Use (Nor Sor Sam Nor)   |              |   |             |         |              |
| Certificate of Ose (Nor Sor Sam)  Certificate of Possession (Sor Kor Nung)       |              | 1                                       |             |         | 1            |
| Rent or Lease (chao teedin)  |              | 1                                       |             |         | 1            |
| Total  |              |   |             |         |              |
| i otai   | Khwan Maar   | Ing Sub-district <sup>2</sup>           |             |         | 1            |
| Title Deed (Chanot)  | Niiwaii weau | ling Sub-uistrict-                      |             |         |              |
| Confirmed Certificate of Use (Nor Sor Sam Kor)                                   |              |   |             |         |              |
| Certificate of Use (Nor Sor Sam Nor)   |              |   |             |         |              |
| Certificate of Ose (Nor Son Sam)  Certificate of Possession (Sor Kor Nung)       |              |   |             |         |              |
| Rent or Lease (chao teedin)  |              |   |             |         |              |
| Total  |              |   |             |         |              |
| Total  | Khwao 9      | L<br>Sub-district <sup>2</sup>          |             |         | 1            |
| Title Deed (Chanot)  | Nilwau C     | Jub-uistrict-                           |             |         |              |
| Confirmed Certificate of Use (Nor Sor Sam Kor)                                   |              |   |             |         |              |
| Certificate of Use (Nor Sor Sam)   |              |   |             |         |              |
| Certificate of Possession (Sor Kor Nung)   |              |   |             |         |              |
| Rent or Lease (chao teedin)  |              |   |             |         |              |
| Total  |              |   |             |         |              |
| Total  | Doet St      | ub-district <sup>2</sup>                |             |         |              |
| Title Deed (Chanot)  |              |   |             |         |              |
| Confirmed Certificate of Use (Nor Sor Sam Kor)                                   |              |   |             |         |              |
| Certificate of Use (Nor Sor Sam)   |              |   |             |         |              |
| Certificate of Possession (Sor Kor Nung)   |              |   |             |         |              |
| Rent or Lease (chao teedin)  |              |   |             |         |              |
| Total  |              | 1                                       |             |         | 1            |
| · Jui  | Du Thuna     | Sub-district <sup>2</sup>               |             |         | ı            |
| Title Deed (Chanot)  |              |   |             |         |              |
| Confirmed Certificate of Use (Nor Sor Sam Kor)                                   |              |   |             |         |              |
| Certificate of Use (Nor Sor Sam)   |              | 1                                       |             |         |              |
| Certificate of Possession (Sor Kor Nung)   |              | 1                                       |             |         |              |
| Rent or Lease (chao teedin)  |              | 1                                       |             |         |              |
| Total  |              |   |             |         |              |
| . 3001   | Samran S     | Sub-district <sup>2</sup>               |             |         | ı            |
| Title Deed (Chanot)  | - Callium    | 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |             |         |              |
| Confirmed Certificate of Use (Nor Sor Sam Kor)                                   |              | 1                                       |             |         |              |
| Certificate of Use (Nor Sor Sam)   |              |   |             |         |              |
| Certificate of Possession (Sor Kor Nung)   |              |   |             |         |              |
| Rent or Lease (chao teedin)  |              |   |             |         |              |
| Total  |              |   |             |         |              |
| GRAND TOTAL  |              |   |             |         | <del> </del> |
| NOTES: 11 Index Roi Et DOH District Office                                       | 1            | I.                                      | l           |         | I.           |

NOTES: <sup>1</sup>Under Roi Et DOH District Office <sup>2</sup>Under Yasothon DOH District Office

# **Appendix 2. List of AHs by Impact**

The names of the Affected Households have been deleted to protect their privacy.

**List of AHs Due to Loss of Shops** 

|     | 2.00 01 74.10 24 |              |         | Location |   |       | Type of              |                                |
|-----|------------------|--------------|---------|----------|---|-------|----------------------|--------------------------------|
| No. | AH Code          | AP Name      | Village | km       | m | L/R   | business             | Type of Structure              |
|     | Sakon Nak        | hon          |         | IXIII    |   | 2)    | 200000               |                                |
|     |                  | on Nakhon II |         |          |   |       |                      |                                |
| 1   |                  |              |         |          |   | R     | Noodles &            | Wooden pole,                   |
|     |                  |              |         |          |   | 11    | local food           | corrugated roof                |
| 2   |                  |              |         |          |   | R     | Meat                 | Wooden pole,                   |
|     |                  |              |         |          |   |       | Basketry &           | corrugated roof Wooden pole,   |
| 3   |                  |              |         |          |   | R     | Gen'l trading        | corrugated roof                |
|     |                  |              |         |          |   | _     |                      | Wooden pole,                   |
| 4   |                  |              |         |          |   | R     | Basketry             | corrugated roof                |
| 5   |                  |              |         |          |   | R     | Basketry             | Wooden pole,                   |
|     |                  |              |         |          |   | 11    | Daskelly             | corrugated roof                |
| 6   |                  |              |         |          |   | R     | Basketry             | Wooden pole,                   |
|     |                  |              |         |          |   |       | -                    | corrugated roof Concrete pole, |
| 7   |                  |              |         |          |   | R     | Gen'l trading        | corrugated roof                |
|     |                  |              |         |          |   | Б     | Deelsetms            | Wooden pole,                   |
| 8   |                  |              |         |          |   | R     | Basketry             | corrugated roof                |
| 9   |                  |              |         |          |   | R     | Basketry &           | Wooden pole,                   |
|     |                  |              |         |          |   | .``   | Gen'l trading        | corrugated roof                |
| 10  |                  |              |         |          |   | R     | Basketry & furniture | Wooden pole, corrugated roof   |
|     |                  |              |         |          |   |       | Agricultural         | Wooden pole,                   |
| 11  |                  |              |         |          |   | L     | product              | corrugated roof                |
| 12  |                  |              |         |          |   | L     | Garden               | Wooden pole,                   |
| 12  |                  |              |         |          |   | L     | Garden               | corrugated roof                |
| 13  |                  |              |         |          |   | R     | Gen'l trading        | Wooden pole,                   |
|     |                  |              |         |          |   |       |                      | corrugated roof Wooden pole,   |
| 14  |                  |              |         |          |   | R     | Basketry             | corrugated roof                |
| 4.5 |                  |              |         |          |   |       | 0 111 1              | Wooden pole,                   |
| 15  |                  |              |         |          |   | L     | Grilled meat         | corrugated roof                |
| 16  |                  |              |         |          |   | R     | Basketry             | Wooden pole,                   |
|     |                  |              |         |          |   | . ` ` | Buonony              | corrugated roof                |
| 17  |                  |              |         |          |   | R     | Basketry             | Wooden pole, corrugated roof   |
|     |                  |              |         |          |   |       | Agricultural         | Wooden pole,                   |
| 18  |                  |              |         |          |   | L     | product              | corrugated roof                |
| 40  |                  |              |         |          |   | _     |                      | Wooden pole,                   |
| 19  |                  |              |         |          |   | R     | Basketry             | corrugated roof                |
| 20  |                  |              |         |          |   | R     | Basketry             | Wooden pole,                   |
|     |                  |              |         |          |   | 11    | Dasketry             | corrugated roof                |
| 21  |                  |              |         |          |   | R     | Gen'l trading        | Wooden pole,                   |
|     |                  |              |         |          |   |       | Basketry &           | corrugated roof Wooden pole,   |
| 22  |                  |              |         |          |   | R     | gen'l trading        | corrugated roof                |
| 22  |                  |              |         |          |   | Г     | Basketry &           | Wooden pole,                   |
| 23  |                  |              |         |          |   | R     | furniture            | corrugated roof                |
| 24  |                  |              |         |          |   | L     | Gen'l trading        | Wooden pole,                   |
|     |                  |              |         |          |   |       | Jonn dading          | corrugated roof                |
| 25  |                  |              |         |          |   | L     | Grilled meat         | Wooden pole,                   |
|     |                  |              |         | ]        |   | l     |                      | corrugated roof                |

| No. | AH Code | AP Name | Village | km | ocation<br>m | L/R | Type of business           | Type of Structure               |
|-----|---------|---------|---------|----|--------------|-----|----------------------------|---------------------------------|
| 26  |         |         |         |    |              | L   | Agricultural product       | Wooden pole, corrugated roof    |
| 27  |         |         |         |    |              | L   | Agricultural               | Wooden pole,                    |
| 20  |         |         |         |    |              |     | product                    | corrugated roof Wooden pole,    |
| 28  |         |         |         |    |              | R   | Meat                       | corrugated roof                 |
| 29  |         |         |         |    |              | R   | Meat                       | Wooden pole, corrugated roof    |
| 30  |         |         |         |    |              | L   | Meat                       | Wooden pole, corrugated roof    |
|     |         |         |         |    |              |     |                            | corragated roof                 |
| 31  |         |         |         |    |              | R   | meat shop                  | wooden pole, corrugated roof    |
| 32  |         |         |         |    |              | L   | hardware<br>store          | iron pole,<br>corrugated roof   |
| 33  |         |         |         |    |              | L   | chicken rice & noodle shop | iron pole,<br>corrugated roof   |
| 34  |         |         |         |    |              | L   | noodle shop                | iron pole,<br>corrugated roof   |
| 35  |         |         |         |    |              | L   | cloth shop                 | iron pole,<br>corrugated roof   |
| 36  |         |         |         |    |              | R   | ready cooked food          | wooden pole,<br>thatched roof   |
| 37  |         |         |         |    |              | L   | cook to order single dish  | wooden pole, corrugated roof    |
| 38  |         |         |         |    |              | L   | noodle shop                | wooden pole, corrugated roof    |
| 39  |         |         |         |    |              | L   | agricultural produce       | iron pole,<br>corrugated roof   |
| 40  |         |         |         |    |              | L   | grocery store              | iron pole,<br>corrugated roof   |
|     |         |         |         |    |              |     |                            |                                 |
| 41  |         |         |         |    |              | R   | grilled<br>chicken         | wooden pole,<br>thatched roof   |
| 42  |         |         |         |    |              | R   | food to order,<br>noodle   | wooden pole,<br>thatched roof   |
|     |         |         |         |    |              |     |                            |                                 |
| 43  |         |         |         |    |              | R   | drink                      | steel pole,<br>corrugated roof  |
| 44  |         |         |         |    |              | R   | local food -<br>Laab       | steel pole,<br>thatched roof    |
| 45  |         |         |         |    |              | R   | furniture                  | temporary canvas tent           |
| 46  |         |         |         |    |              | R   | food and<br>drink          | wooden pole,<br>thatched roof   |
| 47  |         |         |         |    |              | R   | food and<br>drink          | wooden pole,<br>thatched roof   |
| 48  |         |         |         |    |              | R   | hay storage                | concrete pole,<br>thatched roof |
| 49  |         |         |         |    |              | R   | snack and<br>drink         | steel pole,<br>corrugated roof  |
| 50  |         |         |         |    |              | R   | grilled<br>chicken         | wooden pole,<br>corrugated roof |
| 51  |         |         |         |    |              | R   | grilled<br>chicken         | wooden pole,<br>corrugated roof |
| 52  |         |         |         |    |              | R   | grilled chicken            | wooden pole,                    |
| 32  |         |         |         |    |              | K   | & local food               | corrugated roof                 |

| No.  | AH Code | AP Name | Village | L  | ocation |     | Type of                   | Type of Structure               |
|------|---------|---------|---------|----|---------|-----|---------------------------|---------------------------------|
| INO. | ATTCODE | AF Name | Village | km | m       | L/R | business                  | Type of Structure               |
| 53   |         |         |         |    |         | R   | grilled<br>chicken & fish | wooden pole, corrugated roof    |
| 54   |         |         |         |    |         | R   | local food                | concrete pole, corrugated roof  |
| 55   |         |         |         |    |         | R   | local food                | concrete pole, corrugated roof  |
|      |         |         |         |    |         |     |                           |                                 |
| 56   |         |         |         |    |         | R   | grilled<br>chicken        | wooden pole, corrugated roof    |
| 57   |         |         |         |    |         | R   | Papaya<br>Salad           | wooden pole,<br>thatched roof   |
| 58   |         |         |         |    |         | R   | watermelon                | wooden pole, corrugated roof    |
| 59   |         |         |         |    |         | R   | watermelon                | wooden pole, corrugated roof    |
| 60   |         |         |         |    |         | R   | watermelon                | wooden pole, corrugated roof    |
| 61   |         |         |         |    |         | R   | local food -<br>duck Laab | wooden pole, corrugated roof    |
| 62   |         |         |         |    |         | R   | grilled chicen            | wooden pole, corrugated roof    |
| 63   |         |         |         |    |         | R   | watermelon                | wooden pole,<br>corrugated roof |
| 63   |         |         |         |    |         | •   |                           |                                 |

# List of AHs Due to Loss of Paddies

| Nio   | AH   | Name of AD | Village | Cub Diotriot | Loca | ation | Side of  | Size   |
|-------|------|------------|---------|--------------|------|-------|----------|--------|
| No.   | Code | Name of AP | Village | Sub District | km   | m     | the road | (sq.m) |
| Roi E | t    |            |         |              |      |       |          | 17,040 |
| 1     |      |            |         |              |      |       | R        | 480    |
| 2     |      |            |         |              |      |       | R        | 720    |
| 3     |      |            |         |              |      |       | R        | 600    |
| 4     |      |            |         |              |      |       | R        | 480    |
| 5     |      |            |         |              |      |       | R        | 360    |
| 6     |      |            |         |              |      |       | R        | 600    |
| 7     |      |            |         |              |      |       | R        | 720    |
| 8     |      |            |         |              |      |       | R        | 720    |
| 9     |      |            |         |              |      |       | R        | 480    |
| 10    |      |            |         |              |      |       | R        | 360    |
| 11    |      |            |         |              |      |       | R        | 240    |
| 12    |      |            |         |              |      |       | R        | 600    |
| 13    |      |            |         |              |      |       | R        | 360    |
| 14    |      |            |         |              |      |       | R        | 360    |
| 15    |      |            |         |              |      |       | R        | 480    |
| 16    |      |            |         |              |      |       | R        | 360    |
| 17    |      |            |         |              |      |       | R        | 600    |
| 18    |      |            |         |              |      |       | R        | 240    |
| 19    |      |            |         |              |      |       | R        | 720    |
| 20    |      |            |         |              |      |       | R        | 600    |
| 21    |      |            |         |              |      |       | R        | 240    |
| 22    |      |            |         |              |      |       | R        | 360    |
| 23    |      |            |         |              |      |       | R        | 360    |
| 24    |      |            |         |              |      |       | R        | 240    |
| 25    |      |            |         |              |      |       | R        | 600    |
| 26    |      |            |         |              |      |       | R        | 360    |

|          | AH     |            |         |              | Locati   | ion | Side of  | Size       |
|----------|--------|------------|---------|--------------|----------|-----|----------|------------|
| No.      | Code   | Name of AP | Village | Sub District | km       | m   | the road | (sq.m)     |
| 27       |        |            |         |              | 1 1 1    |     | R        | 480        |
| 28       |        |            |         |              |          |     | R        | 360        |
| 29       |        |            |         |              |          |     | R        | 720        |
| 30       |        |            |         |              |          |     | R        | 600        |
| 31       |        |            |         |              |          |     | R        | 360        |
| 32       |        |            |         |              |          |     | R        | 360        |
| 33       |        |            |         |              |          |     | R        | 360        |
| 34       |        |            |         |              |          |     | R        | 480        |
| 35       |        |            |         |              |          |     | R        | 600        |
| 36       |        |            |         |              |          |     | R        | 480        |
|          | sathon |            |         |              |          |     |          | 43,056     |
| 37       |        |            |         |              |          |     | R        | 1,200      |
| 38       |        |            |         |              |          |     | R        | 1,200      |
| 39       |        |            |         |              |          |     | R        | 180        |
| 40       |        |            |         |              |          |     | R        | 960        |
| 41       |        |            |         |              |          |     | R        | 960        |
| 42       |        |            |         |              |          |     | R        | 1,320      |
| 43       |        |            |         |              |          |     | R        | 360        |
| 44       |        |            |         |              |          |     | R        | 360        |
| 45       |        |            |         |              |          |     | R        | 360        |
| 46       |        |            |         |              |          |     | R        | 600        |
| 47       |        |            |         |              |          |     | R        | 1,200      |
| 48       |        |            |         |              |          |     | R        | 2,400      |
| 49       |        |            |         |              |          |     | R        | 480        |
| 50       |        |            |         |              |          |     | R        | 480        |
| 51       |        |            |         |              |          |     | R        | 1,800      |
| 52<br>53 |        |            |         |              |          |     | R<br>R   | 600        |
| 54       |        |            |         |              |          |     | R        | 240<br>480 |
| 55       |        |            |         |              |          |     | R        | 2,400      |
| 56       |        |            |         |              |          |     | R        | 1,920      |
| 57       |        |            |         |              |          |     | R        | 1,680      |
| 58       |        |            |         |              |          |     | R        | 540        |
| 59       |        |            |         |              |          |     | R        | 720        |
| 60       |        |            |         |              |          |     | R        | 960        |
| 61       |        |            |         |              |          |     | R        | 336        |
| 62       |        |            |         |              |          |     | R        | 1,560      |
| 63       |        |            |         |              |          |     | R        | 600        |
| 64       |        |            |         |              |          |     | R        | 1,800      |
| 65       |        |            |         |              |          |     | R        | 420        |
| 66       |        |            |         |              |          |     | R        | 480        |
| 67       |        |            |         |              |          |     | R        | 600        |
| 68       |        |            |         |              |          |     | R        | 1,200      |
| 69       |        |            |         |              |          |     | R        | 240        |
| 70       |        |            |         |              |          |     | R        | 1,200      |
| 71       |        |            |         |              |          |     | R        | 660        |
| 72       |        |            |         |              |          |     | R        | 120        |
| 73       |        |            |         |              | <u> </u> |     | R        | 360        |
| 74       |        |            |         |              |          |     | R        | 360        |
| 75       |        |            |         |              | 1        |     | R        | 360        |
| 76       |        |            |         |              | +        |     | R        | 240        |
| 77       |        |            |         |              | +        |     | R        | 360        |
| 78       |        |            |         |              | + +      |     | R        | 360        |
| 79       |        |            |         |              | + +      |     | R        | 480        |
| 80       |        |            |         |              |          |     | R        | 480        |
| 81       |        |            |         |              | <u> </u> |     | R        | 480        |
| 82       |        |            |         |              |          |     | R        | 240        |

| NIa | AH   | Name of AD | \/;!!=== | Cult District | Loca | ation | Side of  | Size   |
|-----|------|------------|----------|---------------|------|-------|----------|--------|
| No. | Code | Name of AP | Village  | Sub District  | km   | m     | the road | (sq.m) |
| 83  |      |            |          |               |      |       | R        | 480    |
| 84  |      |            |          |               |      |       | R        | 360    |
| 85  |      |            |          |               |      |       | R        | 480    |
| 86  |      |            |          |               |      |       | R        | 600    |
| 87  |      |            |          |               |      |       | R        | 420    |
| 88  |      |            |          |               |      |       | R        | 600    |
| 89  |      |            |          |               |      |       | R        | 840    |
| 90  |      |            |          |               |      |       | R        | 300    |
| 91  |      |            |          |               |      |       | R        | 720    |
| 92  |      |            |          |               |      |       | R        | 1,920  |
| 92  |      |            |          |               |      |       |          | 60,096 |

**List of AHs with Impacts 10% or More (Severe)** 

| List of Ans with impacts 10% of More (Severe) |      |               |         |    |         |     |          |  |
|---|------|---------------|---------|----|---------|-----|----------|--|
| No./  | Code | Name of AP    | Village | _  | ocation | )   | Severity |  |
| Province                                      | Ocac | Tallio of 7th | Villago | km | m       | L/R | Coverny  |  |
| Roi Et  |      |               |         |    |         |     |          |  |
| 1   |      |               |         |    |         | R   | 10.0%    |  |
| 2   |      |               |         |    |         | R   | 12.6%    |  |
|   |      |               |         |    |         |     |          |  |
| 3   |      |               |         |    |         | R   | 10.3%    |  |
| 4   |      |               |         |    |         | R   | 10.5%    |  |
| 5   |      |               |         |    |         | R   | 10.9%    |  |
| 6   |      |               |         |    |         | R   | 12.6%    |  |
| 7   |      |               |         |    |         | R   | 15.2%    |  |
| 8   |      |               |         |    |         | R   | 15.4%    |  |
| 9   |      |               |         |    |         | R   | 15.7%    |  |
| 10  |      |               |         |    |         | R   | 16.8%    |  |
| 11  |      |               |         |    |         | R   | 18.0%    |  |

# **List of AHs Deemed Vulnerable**

| No.  | AH Code      | Name of AP | Location | on  | Village | Female<br>HH | Elderly | Disabled | Poor<br>HH |
|------|--------------|------------|----------|-----|---------|--------------|---------|----------|------------|
| Sako | Sakon Nakhon |            |          | L/R |         | 4            | 5       | 3        | 0          |
| S    | akon Nakhor  | n II       |          |     |         | 3            | 4       | 3        | 0          |
| 1    |              |            |          | L   |         |              | 1       |          |            |
| 2    |              |            |          | R   |         |              |         | 1        |            |
| 3    |              |            |          | R   |         |              | 1       | 1        |            |
| 4    |              |            |          | R   |         | 1            | 1       |          |            |
| 5    |              |            |          | R   |         | 1            |         | 1        |            |
| 6    |              |            |          | R   |         | 1            | 1       |          |            |
|      |              |            |          |     |         | 1            | 1       | 0        | 0          |
| 7    |              |            |          | L   |         | 1            | 1       |          |            |
|      |              |            |          |     |         | 0            | 5       | 1        | 0          |
| 8    |              |            |          | R   |         |              |         | 1        |            |
| 9    |              |            |          | R   |         |              | 1       |          |            |
| 10   |              |            |          | R   |         |              | 1       |          |            |
| 11   |              |            |          | R   |         |              | 1       |          |            |
| 12   |              |            |          | R   |         |              | 1       |          |            |
| 13   |              |            |          | R   |         |              | 1       |          |            |
|      |              |            |          |     |         | 14           | 31      | 0        | 1          |
| 14   |              |            |          | R   |         |              | 1       |          |            |
| 15   |              |            |          | R   |         | 1            | 1       |          |            |

| No. | AH Code | Name of AP       | Locatio | n | Village | Female<br>HH | Elderly | Disabled | Poor<br>HH |
|-----|---------|------------------|---------|---|---------|--------------|---------|----------|------------|
| 16  | 001mc   | สุพล บัวประเสริฐ |         | R |         |              | 1       |          |            |
| 17  |         | -                |         |   |         |              | 1       |          |            |
| 18  |         |                  |         |   |         | 1            |         |          |            |
| 19  |         |                  |         |   |         |              | 1       |          |            |
| 20  |         |                  |         |   |         |              | 1       |          |            |
| 21  |         |                  |         |   |         |              | 1       |          |            |
| 22  |         |                  |         |   |         | 1            | 1       |          |            |
| 23  |         |                  |         |   |         | 1            |         |          |            |
| 24  |         |                  |         |   |         |              | 1       |          |            |
| 25  |         |                  |         |   |         | 1            | 1       |          |            |
| 26  |         |                  |         |   |         |              | 1       |          |            |
| 27  |         |                  |         |   |         |              | 1       |          |            |
| 28  |         |                  |         |   |         |              | 1       |          |            |
| 29  |         |                  |         |   |         | 1            |         |          |            |
| 30  |         |                  |         |   |         |              | 1       |          |            |
| 31  |         |                  |         |   |         | 1            | 1       |          |            |
| 32  |         |                  |         |   |         |              | 1       |          |            |
| 33  |         |                  |         |   |         |              | 1       |          |            |
| 34  |         |                  |         |   |         |              | 1       |          |            |
| 35  |         |                  |         |   |         |              | 1       |          |            |
| 36  |         |                  |         |   |         | 1            | 1       |          |            |
| 37  |         |                  |         |   |         | 1            | 1       |          |            |
| 38  |         |                  |         |   |         |              | 1       |          |            |
| 39  |         |                  |         |   |         |              | 1       |          |            |
| 40  |         |                  |         |   |         |              | 1       |          |            |
| 41  |         |                  |         |   |         |              | 1       |          |            |
| 42  |         |                  |         |   |         | 1            |         |          | 1          |
| 43  |         |                  |         |   |         |              | 1       |          |            |
| 44  |         |                  |         |   |         |              | 1       |          |            |
| 45  |         |                  |         |   |         | 1            | 1       |          |            |
| 46  |         |                  |         |   |         | 1            | 1       |          |            |
| 47  |         |                  |         |   |         | 1            | 1       |          |            |
| 48  |         |                  |         |   |         | 1            |         | _        |            |
| 49  |         |                  |         |   |         |              | 1       |          |            |
| 49  |         |                  |         |   |         | 18           | 41      | 4        | 1          |

# **Appendix 3. Consultations**

#### MINUTES OF PUBLIC CONSULTATION

Thailand: Greater Mekong Sub-Region Highway Expansion Project **Expansion of National Highway 22** 

Place of Meeting: Nong Kung Village, Phang Khon Tambun, Phong Khon, Sakon

Nakhon

Date/Time: March 7, 2017 1:30PM

The consultation meeting was attended by a total of 25 stakeholders from Nong Kung Village. Mr. Boonsong Duangprasit, Deputy Director of Highway District 2, Sakon Nakhon District, presented the details proposed road widening project at three sections of National Highway 22. After the project presentation, the stakeholders were encouraged to raise their concerns and comments on the project.

The following summarizes the comments raised by the stakeholders and the responses from the DOH:

| Stakeholder Issue / Comments   | DOH Response   |
|--|--|
| When the road is widened, there are safety issues that need to be considered by DOH. The U-turn should be located and designed properly to consider safety. What is the design of the U-turn?  | Safety issues will be included in the detailed design of the project. The U-turn will not be elevated. The typical U-turn design was shown to the stakeholders.  |
| The road will now have a median barrier and Uturn slot. The proposed U-turn slot might be located far from the village which would make it difficult for the villagers to go to the other side of the road. A cross-over or pedestrian overpass is suggested at the highway.   | There is a concern on the provision of elevated pedestrian crossing because some people, especially the elderly, would have difficulty climbing the stairs.  |
| In general, the community does not have any objection on the proposed expansion of the two-lane highway to four lanes. The road widening will be good for the safety of the village. However, the villagers need be informed in advance about the schedule of implementation so that they can prepare properly. There are some structures and shops that are on the right of way of the road which need to relocate. The people are willing to move from the right of way but only needs to know when the project will happen. | The detailed design of the project is now being finalized and the construction is proposed by middle of 2017. The DOH is now being required to submit documents to ADB for the processing of the loan. |
| Advance notice should be made to the people at least 3 months prior to start of construction.  | Noted  |
| What is the distance of the road to be widened from the centerline?  | The road widening is 15 – 20 meters from centerline.   |
| During road construction, can the people still continue selling?   | The DOH will discuss this matter with the Provincial Government.   |
| Is it possible to construct underground passageway for people?   | The underground passageway is more difficult to implement based on engineering requirements.   |

| Stakeholder Issue / Comments   | DOH Response   |
|--|--|
| The provision and selection of areas for   | The DOH has policy and criteria for the  |
| pedestrian crossing has been discussed several times particularly in areas near schools. This is needed for the safety of children who will now cross wider roads. | building of pedestrian crossover. The DOH needs to consult with the community when building crossovers.  |
| The community will submit a letter to DOH to officially request for the provision of crossovers in areas with sensitive receptors like schools.                    |  |
| There are drainage canals which are not functioning properly. Will the roads include the design of the drainage system?  | The DOH will incorporate the drainage system. Side drains will be provided.  |
| There is no problem on the removal or cutting of big trees in the right of way. The community can just replant trees.  | The DOH has undertaken an inventory of trees along the right of way. To minimize cutting of trees, the DOH made adjustments in the design to limit the number of trees to be cut. The DOH will present the inventory of affected trees to the Forestry Office. |

# Photo Documentation March 7, 2017 Nong Kung Village, Phang Khon Tambun, Phong Khon, Sakon Nakhon













#### MINUTES OF PUBLIC CONSULTATION

Thailand: Greater Mekong Sub-Region Highway Expansion Project Expansion of National Highway 22

Place of Meeting: Muang Thai Soe, Kusuman Sub-district, Sakon Nakhon District

Date/Time: March 8, 2017 10:00AM

The consultation meeting was attended by a total of 51 stakeholders in Kusuman subdistrict. The Governor of Kusuman sub-district gave the Welcome Address and acknowledged the presence of the stakeholders from various villages in Kusuman subdistrict and also the representatives of the Department of Highway (DOH) and Asian Development Bank (ADB). The Governor encouraged the participants to listen and raise their concerns and comments on the proposed project to be presented by the DOH. Engr. Supachai Sukvanichnant of the DOH gave the presentation of the objectives and details of the proposed road widening project at three sections of National Highway 22.

The following summarizes the comments raised by the stakeholders and the responses from the DOH:

| Stakeholder Issue / Comments  | DOH Response   |
|---|--|
| The community do not have any objection with the proposed widening of NH22. The people have been waiting for the project for a long time.  The design of the U-turn should be close to the  | The DOH would like to get the opinion of the community on where to locate the U-turn. The DOH has guidelines on the design of U-turn but suggestions of the community are also considered.   |
| community and should be particularly near hospitals.  |  |
| The DOH should consider underground system for electrical lines, water supply lines, and other utilities in the design of the road.   | The design of underground system for support facilities is not in the current design.  |
| The level of the new highway might be higher than the community park. This would cause problems on access to the park.  | There will be no changes in the current elevation of the highway.  |
| The widening of the highway and provision of median will separate the communities. This will have an impact on the daily movement of people. Traffic lights should be provided to help the community to cross between two sides of the highway. |  |
| What is the status of budget approval? If budget is not sufficient, how will the Government proceed with the project implementation?  | The Cabinet has already approved the budget of the project. Additional financial support is being requested from the ADB. The DOH is now preparing the requirements of the ADB for the loan. |
|   | If the Government budget is not sufficient, the DOH will review the project design again.  |
| When will the DOH complete the design of the project?   | The detailed design of the project is almost complete with minor modifications. The detailed design should be completed in two months.   |

| Stakeholder Issue / Comments  | DOH Response   |
|---|--|
| The existing eight lanes near the market is very short. Will the project include the expansion of the eight lanes? Government should explore using other Government budget for improvement of existing eight lanes such as traffic lights, etc.   | This is not included because the budget for the project is only for the expansion of the sections with existing two lanes.             |
| The existing drainage canals have difficulty draining water. This should be considered by the DOH in the design.  | The project will include drainage canals on both sides of the road.  |
| There should be crossover infront of schools for<br>the safety of school children. There should<br>also be a crossover at the police station.   | When the detailed design is completed, the DOH will again meet with the community to present the locations of the crossover and Uturn. |
| Underground crossing should be explored by DOH.   | People are concerned about the maintenance of underground crossing.  |
| Will the road expansion be on one side or on both sides of the existing road?  The community strongly supports the project.   | The road expansion will be on both sides of the road.  |
| The DOH needs to consider the suggestions of the community in the detailed design and present the detailed design again.  |  |
| The people showed support to the project by raising their hands when asked by the Governor whether they support the project.  |  |
| How long is the construction period?  | Construction will take place for about two years.  |
| The detailed design should consider the impacts to the community when the level of the highway is higher than the elevation of the houses.  | This will be considered in the design of drainage canals.  |
| The project will likely cause problems on linkages of villages and drainage issues. However, the community acknowledges that the quality of life of the people will be better with the proposed project. It will boast tourism and increase income of the community because more tourists will be coming to the area. The community look forward to the implementation of the project soon. |  |
| In case, ADB will not approve the loan, how will the Government finance the project?  | The project has been approved by Cabinet. The Government will find ways to implement the project.                                      |
| Kusuman subdistrict experience flooding in some areas. The drainage system should be considered in the detailed design of the road.   | This is included in the design of the project.   |

# Photo Documentation March 8, 2017 Muang Thai Soe, Kusuman Sub-district, Sakon Nakhon District













#### MINUTES OF PUBLIC CONSULTATION

Thailand: Greater Mekong Sub-Region Highway Expansion Project Expansion of National Highway 22

Place of Meeting: Sawang Daen Din Subdistrict, Sakon Nakhon District

Date/Time: March 8, 2017 2:00PM

The consultation meeting was attended by a total of 59 participants from Sawang Daen Din subdistrict offices, villages and school representatives. The Executive Assistant of the Governor of Sawang Daen Din sub-district presided the meeting and acknowledged the presence of the representatives of the Department of Highway (DOH) and Asian Development Bank (ADB). Mr. Boonsong Duangprasit, Deputy Director of Sakon Nakhon 2 Highway District Office gave the presentation of the objectives and details of the proposed road widening project at three sections of National Highway 22.

The following summarizes the comments raised by the stakeholders and the responses from the DOH:

| Stakeholder Issue / Comments  | DOH Response   |
|---|--|
| When is the start of project implementation?  | The detailed design of the project has been prepared but there are still some modifications. The designed design should be completed in May.   |
| There are teak trees that should be conserved along the road. The DOH should minimize the cutting of trees. It is acknowledged that in the past, the DOH has been planting trees instead of cutting trees.  | The width of the road has been adjusted in some sections to minimize cutting of trees.   |
| There are no significant environmental impacts that are anticipated as observed from previous road construction activities. The community is expecting DOH to implement the project soon because of the benefits that will be realized. Logistics will also be enhanced because of the road widening project. |  |
| Will the project include the existing roads with four lanes?  | The project will widen the sections with two lanes.  |
| The project should consider the safety of the community.  | The DOH has been looking at sensitive receptors as part of the requirement of the ADB. Impacts on sensitive receptors will be considered such as provision of crossover bridge in schools. The DOH recognizes the impact on safety of school children and will include the crossover in the detailed design. |
| The Governor of Pantain subdistrict said that the existing road has no median and that there is no clear point for U-turn which compromises safety of the community. The right location of the U-turn should be selected particularly in Pantai subdistrict where accidents happened in the past.             | The DOH has guidelines and criteria on selecting locations of U-turn. This is based on traffic volume and other factors.   |

| Stakeholder Issue / Comments   | DOH Response   |
|--|--|
| The Chief of Banten subdistrict said that the design of the project should include improvement of drainage.  | The section of the road in Banten subdistrict is already four lanes and is not included in the project.  |
| There are sections along the road with damaged drainage canals. The final design should consider these canals.   | The DOH district office surveyed the right of way together with the engineering team. The initial design was to widen the road only on one side but because of the concerns on the drainage canal, the design of the road now includes expansion on both sides to include the provision of side drains. The number of pipes will increase. The DOH will ensure that the drainage is designed properly. |
| Cutting of teak trees should be minimized.   | The final number of affected trees will be available soon based on detailed design which minimized cutting of trees.   |
| The school in Nong Kung is adjacent to the road. Safety issues should be considered by the DOH.  | The DOH acknowledges the safety issue which is a key consideration because cars tend to drive faster in four lane roads than in two lane roads.  |
| There should be elevated flyover in areas near schools. The cost may be higher for elevated flyover but this should be explored by DOH if necessary in certain areas with sensitive receptors. |  |
| There are areas with shops along the road. Can the villagers still continue selling?   | The DOH conducted consultation meeting with villagers in Nong Kung. The matter is being referred to the province. There is a suggestion for assistance in relocating the shops and also to build a small road near their shops.  |

# Photo Documentation March 8, 2017 Sawang Daen Din Sub-district, Sakon Nakhon District

















#### MINUTES OF PUBLIC CONSULTATION

Thailand: Greater Mekong Sub-Region Highway Expansion Project **Expansion of National Highway 22** 

Place of Meeting: Wong Ta Mua Municipality, Nakon Phanom Province

Date/Time: March 9, 2017 10:00AM

The consultation meeting was attended by a total of 74 participants from the municipality of Wong Ta Mua in Nakon Phanom Province that includes representatives from various villages in the municipality. The meeting was presided by the Governor of Wong Ta Mua who acknowledged the presence of the representatives of the Department of Highway (DOH) and Asian Development Bank (ADB). Ms. Manlika Nuankerd of the Department of Highway introduced the objectives of the meeting and the project. She cited that the Cabinet approved the widening of Sakon Nakhon – Nakon Phanom road and that 50% of the budget is already secured. Additional budget is now being requested through a loan from the Asian Development Bank (ADB) and that the ADB wants to ensure compliance of the project with social and environmental safeguards. The stakeholders were encouraged to give their suggestions on the project. Reports are now being prepared for submission to ADB so that by October 2017, DOH may be able to hopefully secure approval of the ADB loan and then implement the project beginning 2018. Engr. Supachai Sukvanichnant, DOH, gave the presentation of the objectives and details of the proposed road widening project at sections of National Highway 22 that will link the provinces of Sakon Nakon and Nakon Phanom.

The following summarizes the comments raised by the stakeholders and the responses from the DOH:

| Stakeholder Issue / Comments  | DOH Response  |
|---|---|
| The community is pleased with the expansion of the highway from two lanes to four lanes. However, it is important for DOH to consider a good position of the U-turn slot that is not far from the village.  | The DOH already prepared the detailed design but there are still modifications on the design.   |
| There is no problem if the widening of the road will require cutting of trees. These are ordinary trees which the villagers can replant after completion of the project.  | Noted.  |
| The provision of the elevated median will hamper movement of motorcycles because they will not be able to cross easily to the other side of the road. Representatives of Ban Kan Sawan and Ban Pon Cha Roen particularly requested that the elevated median be excluded from the project design and instead be replaced by the flat median. | The elevated median is designed to mitigate safety issues and protect the general public from road accidents. Without the center island, there is no clear barrier between the two opposite lanes and more accidents might occur. The DOH will study the appropriate location of the U-turn to ensure convenience of the villagers. The U-turn will be designed in accordance with design standards for highways. |
|   | During the final detailed design, the DOH will present the project again to the villagers for comment on the locations of the U-turn.   |
| There should be crossover infront of schools to ensure safety of school children.   | The DOH is committed to providing the crossover in sensitive areas like schools. The  |

| Stakeholder Issue / Comments  | DOH Response  |
|---|---|
|   | DOH will consider the views of the people on where to locate the U-turn and crossover.  |
| There should be temporary sheds for bus stops.  | The DOH will provide these waiting sheds along the road. The final design will be presented again to the community showing the locations of the waiting sheds.  |
| There is a school in Ban Mahasai that will require a crossover. Some villages have two schools that need crossovers while in some villages there are schools that do not require a crossover because the village and the school are on one side of the highway.                             | Noted.  |
| Majority of the area do not experience flooding. There are also no problems in drainage in the area.  | Noted.  |
| Will the project include street lighting and traffic lights for road safety?  | To be designed.   |
| The municipal head ascertained that the community does not have any objection with the road widening project. He added that people can still raise their suggestions on the detailed design to be finalized by DOH.  The people raised their hands to show support to the proposed project. | Noted.  |
| The villagers need to see the detailed design from DOH so that people can comment and make suggestions on the location of the U-turn and traffic lights.  | Once the detailed design is completed, the DOH will again call a meeting with the villagers to present the design and locations of the Uturn, crossover, and traffic lights and to get their final comments on the design before it is implemented. |
| There is a historical place located about 2 km away from the road. Lighting on the road is necessary for the safety of the people.  | Noted.  |

Photo Documentation
March 9, 2017
Wong Ta Mua Municipality, Nakon Phanom Province

















# **Appendix 4. Draft Project Information Booklet**

#### **English Version**

#### PROJECT INFORMATION

# THA – GMS Highway Expansion Phase 2 Project

# WHAT IS THE THA - GMS Highway Expansion Phase 2 Project?

The project will involve the expansion of NH22 and NH23 road sections from their present single 2-lane carriageways to 4-lane carriageways with a median. Financing of the upgrading of NH22 and NH23 is being considered under the Greater Mekong Sub-region (GMS) Highway Expansion Project.

#### WHO WILL BE IMPLEMENTING THE PROJECT?

The Department of Highways (DOH) of the Ministry of Transport (MOT) is the Executing Agency.

#### WHAT WILL BE THE SCOPE OF THE PROJECT?

The project spans 124.897 km traversing four provinces, 10 districts, 29 sub-districts, and 64 villages. NH22 is longer with 69.84 km than NH23 at 55.057 km. The table below provides in detail, the government administrative units traversed by the two roads.

|                               | •                 |                       | •                             |                |              |
|-------------------------------|-------------------|-----------------------|-------------------------------|----------------|--------------|
| Province                      | District          | Sub-district          | Village                       | Cha            | inage        |
|                               |                   | NH                    | 122                           |                |              |
| a. HW22 Phan<br>100+248 to 11 |                   | g Daen Din (36.58 km; | (i) 60+000 to 72+600, (ii) 83 | +098 to 94+748 | 3, and (iii) |
| Sakon                         | Sawang Daen       | Bong Tai              | Ban Ku Chik                   | 60+250         | 61+175       |
| Nakhon <sup>1</sup>           | Din               | Kho Tai               | Ban Nasam Boom                | 60+250         | 61+175       |
|                               |                   | Bong Tai              | Ban Chum Chai                 | 64+700         | 65+150       |
|                               |                   | Nong Luang            | Ban Nong Yan Chin             | 64+700         | 65+750       |
|                               |                   | Ban Tai               | Ban Tai                       | 68+650         | 69+214       |
|                               |                   | Sawang Daen Din       | Ban Dong Sawan                | 80+575         | 82+725       |
|                               |                   | Sai Mun               | Ban Nong Kun                  | 82+725         | 84+100       |
|                               |                   |                       | Ban Sai Mun                   | 84+100         | 85+825       |
|                               |                   |                       | Ban Kham Mek                  | 85+825         | 87+000       |
|                               |                   | Phan Na               | Ban Ma                        | 87+000         | 88+475       |
|                               |                   |                       | Ban Phan Na                   | 88+475         | 90+000       |
|                               |                   |                       | Ban Muang Thong               | 90+000         | 91+300       |
|                               |                   |                       | Ban Man                       | 91+300         | 92+000       |
|                               |                   | That Thong            | Ban Duea                      | 92+000         | 92+800       |
|                               |                   | Waeng                 | Ban Dong Khueang              | 92+800         | 97+890       |
|                               | Phang Khon        | Muang Khai            | Ban Pha Khao                  | 98+500         | 99+250       |
|                               |                   |                       | Ban Muang Khai                | 99+250         | 100+233      |
|                               |                   |                       | Ban Dong                      | 100+233        | 101+050      |
|                               |                   |                       | Ban Ang                       | 101+050        | 101+527      |
|                               |                   |                       | Ban Muang Kam                 | 101+806        | 102+500      |
|                               |                   |                       | Ban Kham Charoen              | 102+500        | 103+800      |
|                               |                   | Phang Khon            | Ban Sang Khui                 | 103+800        | 104+899      |
| b. HW22 Sako                  | n Nakhon to Nakho | on Phanom (33.26 km;  | km 180+450 to 213+800)        |                |              |
| Sakon                         | Mueang Sakon      | Tha Rae               | Ban Tha Rae                   | 169+970        | 173+000      |
| Nakhon <sup>2</sup>           | Nakhon            |                       | Ban Nong Bua Thong            | 173+000        | 175+000      |
|                               | Phon Na Kaeo      | Na Kaeo               | Ban Thepnim It                | 175+400        | 181+000      |
|                               | Kusuman           | Na Pho                | Ban Na Pho Noi                | 181+000        | 184+000      |

| Province                 | District      | Sub-district              | Village                        | Chair      | nage    |
|--------------------------|---------------|---------------------------|--------------------------------|------------|---------|
|                          |               |                           | Ban Na Pho                     | 184+000    | 186+500 |
|                          |               | Kusuman                   | Ban Kusuman                    | 186+500    | 194+000 |
|                          |               | Phothisan                 | Ban Non Rung Rueang            | 194+800    | 196+400 |
|                          |               |                           | Ban Niramai                    | 196+400    | 198+490 |
| Nakhon                   | Mueang Nakhon | Wang Ta Mua               | Chok Amnuay                    | 200+150    | 200+650 |
| Phanom <sup>3</sup>      | Phanom        | -                         | Non Chom Phu                   | 204+400    | 205+010 |
|                          |               |                           | Nong Saeng                     | 206+650    | 207+675 |
|                          |               |                           | Wang Muang                     | 207+675    | 208+115 |
|                          |               |                           | Wang Ta Mua                    | 209+050    | 209+980 |
|                          |               |                           | Porn Charoen                   | 209+050    | 209+980 |
|                          |               | Kurukhu                   | Ban Nong Ya                    | 213+900    | 214+650 |
| Subtotals                |               |                           |                                |            |         |
| 2 Provinces              | 6 Districts   | 18 Sub-districts          | 37 Villages                    | 69.84 km   |         |
|                          |               | NH                        |                                |            |         |
|                          |               | 557 km; 115+512 to 14     |                                | 1          | 1       |
| Roi Et                   | Thawat Buri   | Niwet                     | Pratu Chai                     | 115+512    | 116+749 |
|                          |               |                           | Nikom                          | 116+749    | 120+612 |
|                          |               |                           | Niwet                          | 120+612    | 125+312 |
|                          |               | Um Mao                    | Um Mao                         | 125+312    | 126+112 |
|                          |               | Phaisan                   | Fangdaeng                      | 126+112    | 127+912 |
|                          |               |                           | Tha Bo                         | 127+912    | 128+812 |
|                          |               |                           | Don Wua                        | 128+812    | 129+912 |
|                          |               |                           | Hua Bo                         | 129+912    | 131+612 |
|                          | Thung Khao    | Thung Khao Luang          | Wai Noi                        | 131-+612   | 135+312 |
|                          | Luang         |                           | Wai Leum                       | 135+312    | 138+112 |
|                          |               | Maba                      | Tha Sabaeng                    | 138+112    | 139+137 |
|                          | Selaphum      | Klang                     | Tha Khai                       | 139+137    | 139+412 |
|                          | <u> </u>      |                           | Klang (Municipal)              | 139+412    | 142+212 |
|                          |               | 29.4 km; 143+412 to 1     |                                | •          | 1       |
| Yasothon                 | Mueang        | Khwan Meaung <sup>4</sup> | Selaphum                       | 142+212    | 142+412 |
|                          | Yasothon      | Khwao <sup>4</sup>        | Non Yang                       | 151+762    | 153+652 |
|                          |               | Doet                      | Ban Mai Chumphon               | 153+552    | 157+062 |
|                          |               |                           | Ban Kham Daeng                 | 157+062    | 159+112 |
|                          |               |                           | Ban Chuak                      | 159+112    | 161+012 |
|                          |               |                           | Ban Doet                       | 161+012    | 163+832 |
|                          |               | 5 7                       | Ban Nam Pho                    | 163+832    | 164+912 |
|                          |               | Du Thung                  | Ban Du Thung                   | 164+912    | 165+862 |
|                          |               |                           | Ban Kham Bon                   | 165+862    | 166+742 |
|                          |               |                           | Ban Nhong Sang                 | 166+742    | 168+462 |
|                          |               | Samran                    | Ban Nong 1 Tum                 | 168+462    | 170+012 |
|                          |               |                           | Ban Bak                        | 170+012    | 172+112 |
|                          |               |                           | Ban Chiang Wang                | 172+112    | 173+312 |
| Culatotala               |               |                           | Ban Samran                     | 173+312    | 175+527 |
| Subtotals<br>2 Provinces | 4 Districts   | 11 Sub Diatriata          | 27 Villages                    | 55 057 km  |         |
| TOTALS                   | 4 Districts   | 11 Sub-Districts          | 21 Villages                    | 55.057 km  |         |
| 4 Provinces              | 10 Districts  | 29 Sub-Districts          | 64 Villages                    | 124.897 km |         |
|                          |               |                           | kon Nakhon 2 District Office ( |            | -\      |

NOTE: <sup>1</sup> Under the administrative jurisdiction of DOH Sakon Nakhon 2 District Office (Sawag Daen Din)

# WHO ARE ELIGIBLE TO BE ASSISTED UNDER THE PROJECT?

Those utilizing areas within the project affected sites specifically shop owners and paddy farmers, are eligible for assistance in kind within the rules of law as the property belongs to DOH – acquired since 1966 for NH22 and 1967 for NH23.

<sup>&</sup>lt;sup>2</sup> Under the administrative jurisdiction of DOH Sakon Nakhon 1 District Office (Kusuman)

<sup>&</sup>lt;sup>3</sup> Under the administrative jurisdiction of DOH Nakhon Phanom District Office (Pla Pak)

<sup>&</sup>lt;sup>4</sup> Under the administrative jurisdiction of Yasothon DOH District Office (At Samat)`

#### WHAT IS MEANT BY CUT-OFF DATE AND WHEN WILL BE THE CUT-OFF DATE?

The cut-off date is the date prior to which the occupation or use of the project area make users of the area eligible to be categorized as affected persons (AP) or entitled party to receive assistance in kind – not cash. The cut-off-date coincides with the last day of the conduct of the IOL and census of APs, in this case on 08 May 2017, as overseen by the DOH District Office.

#### ARE THE AFFECTED PEOPLE ENTITLED TO ANYTHING FOR THEIR LOSSES?

The detailed category of lost assets and income as well as project resettlement entitlements is recorded in the Resettlement Plan (RP).

- (i) Loss of agricultural lands and crops. Affected households (AH) will be formally linked by project management to appropriate local government offices to access livelihood assistance/ support programs commensurate to their socioeconomic needs.
- (ii) Loss of Shops. Assistance is provided to transfer structures outside the ROW.
- (iii) Vulnerable and severely AHs.
  - Participate in livelihood assistance support program (LASP) by Local Government
  - Priority hiring for unskilled positions with the Contractor

#### HOW ARE THE GRIEVANCES OF APS HEARD AND RESOLVED?

During project construction, the Project Engineer will be responsible in receiving and handling complaints or query regarding the project. Once the project is turned-over to the DOH District offices for maintenance and operation, the assigned focal person of the DOH District will be in-charge of managing grievance redress.

A community member can approach the Project Engineer for complaints or query. Although several channels of communication exist, contacting the Project Engineer directly is the most efficient way to address the grievances. The focal person at the project's construction office will maintain a Record Book to track the following details:

- (v) date of the complaint
- (vi) details of the complainant such as name and contact information
- (vii) description of the grievance
- (viii) responsible entity.

During the construction phase of the project, complaints from APs may be lodged directly to the Project Engineer through the hotline placed on notice boards outside the construction site. The Project Engineer should be able to immediately contact the affected person to discuss the nature of the complaint and the actions to be undertaken to resolve the complaint. Any complaint filed or raised should be immediately responded to within 7 days. If the complaint is not satisfactorily addressed by the project, the AP can use the Government's grievance mechanism.

Following the grievance redress procedures that was established by the Government, the inquiry will be sent to the Project Engineer for verification and resolution. For matters that need verification with the involved members of the community, the Project Engineer will consult with the village head or natural leader for validation and deliberation. The Project Engineer shall be responsible in coordinating with the AP and the village head in taking actions towards the resolution of complaints. Based on practice, complaints are resolved at the village level and no longer go through the next level of the executive branch of the government.

If the complainant is still not satisfied with the actions undertaken to resolve the complaint, he/she may file the complaint with the Provincial Damrongdhama Centre who will conduct

further investigation of the grievance and call on the AP, PMU/DOH District, and the contractor to discuss the resolution of the complaint.

If the grievance remains unresolved after going through the hierarchy of the local government's grievance redress process, the AP has the option to elevate the case to the judicial body.

#### WHO MIGHT BE CONTACTED FOR ANY INQUIRIES ABOUT THE PROJECT?

Name:

Designation:

Telephone Number:

Fax Number: Email address:

#### **Thai Version**

# ข้อมูลโครงการ

# โครงการก่อสร้างทางสายหลักให้เป็น ๔ ช่องจราจร (ระยะที่ ๒)

# โครงการก่อสร้างทางสายหลักให้เป็น ๔ ช่องจราจร (ระยะที่ ๒) คือ อะไร?

โครงการก่อสร้างทางสายหลักให้เป็น ๔ ช่องจราจร ทางหลวงหมายเลข ๒๒ และ ทางหลวงหมายเลข ๒๓ จะขยายเส้นทางจากปัจจุบันสองช่องจราจรให้เป็นสี่ช่องจราจร โดยกำลังได้รับการพิจารณาเพื่อรับเงินกู้ตามแผนการพัฒนาทางหลวงเชื่อมโยงระหว่างประเทศภายใต้กรอบความร่วมมืออนุภูมิภาคลุ่มน้ำโขง (GMS)

# ผู้ดำเนินโครงการคือใคร?

กรมทางหลวง สังกัดกระทรวงคมนาคม เป็นผ่รับผิดชอบดำเนินโครงการ

#### ขอบข่ายของโครงการเป็นอย่างไร?

โครงการก่อสร้างทางสายหลักเป็น ๔ ช่องจราจร (ระยะที่ ๒) ทางหลวงหมายเลข ๒๒ ตอน สว่างแดนดิน - พังโคน และสกลนคร-นครพนม และทางหลวงหมายเลข ๒๓ ตอนร้อยเอ็ด- ยโสธร มีความยาวรวมทั้งหมด ๑๒๔.๘๙๗ กิโลเมตร ใน ๔ จังหวัด ๑๐ อำเภอ ๒๙ ตำบล และ ๖๔ หมู่บ้าน โครงการในทางหลวงหมายเลข ๒๒ จะมีความยาว ๖๙.๘๔ กิโลเมตร ขณะที่โครงการในเขตทางหลวงหมายเลข ๒๓ จะมีความยาว ๕๕.๐๕๗ กิโลเมตร ตารางข้างล่างระบรายละเอียดของหมู่บ้าน ตำบล อำเภอ และจังหวัดที่อยู่ในเขตของโครงการ

| จังหวัด       | อำเภอ                   | ตำบล                 | หมู่บ้าน                    | หลักกิ                | หลักกิโลเมตร   |  |
|---------------|-------------------------|----------------------|-----------------------------|-----------------------|----------------|--|
|               |                         | ทางหลว               | งหมายเลข ๒๒                 |                       |                |  |
|               |                         | เดนดิน _ พังโคน (36. | 58 km; (i) 60+000 to 72+600 | ), (ii) 83+098 to 94+ | 748, and (iii) |  |
| 100+248 to 11 |                         | T                    |                             | T                     |                |  |
| สกลนคร¹       | สว่างแดนดิน             | บงใต้                | กุดจิก                      | 60+250                | 61+175         |  |
|               |                         |                      | นาสมบูรณ์                   | 60+250                | 61+175         |  |
|               |                         | ค้อใต้               | ี่ มีทภูถ                   | 64+700                | 65+150         |  |
|               |                         | หนองหลวง             | หนองย่างชิน                 | 64+700                | 65+750         |  |
|               |                         | ต้าย                 | ต้าย                        | 68+650                | 69+214         |  |
|               |                         | สว่างแดนดิน          | ดงสวรรค์                    | 80+575                | 82+725         |  |
|               |                         | ทรายมูล              | หนองกุง                     | 82+725                | 84+100         |  |
|               |                         |                      | ทรายมูล                     | 84+100                | 85+825         |  |
|               |                         |                      | คำเม็ก                      | 85+825                | 87+000         |  |
|               |                         |                      | ม้า                         | 87+000                | 88+475         |  |
|               |                         | พันนา                | พันนา                       | 88+475                | 90+000         |  |
|               |                         |                      | เมืองทอง                    | 90+000                | 91+300         |  |
|               |                         |                      | โมน                         | 91+300                | 92+000         |  |
|               |                         | ธาตุทอง              | เดื่อ                       | 92+000                | 92+800         |  |
|               |                         | แวง                  | ดอนเขือ                     | 92+800                | 97+890         |  |
| พังโคน        | พังโคน                  | ม่วงไข่              | ผ้าขาว                      | 98+500                | 99+250         |  |
|               |                         |                      | ม่วงไข่                     | 99+250                | 100+233        |  |
|               |                         | ดง                   | 100+233                     | 101+050               |                |  |
|               |                         |                      | อ่าง                        | 101+050               | 101+527        |  |
|               |                         |                      | ม่วงคำ                      | 101+806               | 102+500        |  |
|               |                         |                      | คำเจริญ                     | 102+500               | 103+800        |  |
|               |                         | พังโคน               | สร้างข่ย                    | 103+800               | 104+899        |  |
| ว. ทางหลวงหา  | <u>มายเลข ไอไอ สกลบ</u> |                      | km; km 180+450 to 213+80    | 00)                   | •              |  |

| จังหวัด                        | อำเภอ                                   | ตำบล                   | หมู่บ้าน              | หลักกิ        | โลเมตร  |
|--------------------------------|---|------------------------|-----------------------|---------------|---------|
| สกลนคร <sup>2</sup><br>-<br>-  | เมืองสกลนคร                             | ท่าแร่                 | บ้านท่าแร่            | 169+970       | 173+000 |
|                                |   |                        | บ้านหนองบัวทอง        | 173+000       | 175+000 |
|                                | โพนนาแก้ว                               | นาแก้ว                 | เทพนิมิตร             | 175+400       | 181+000 |
|                                | กุสุมาลย์                               | นาโพธิ์                | นาโพธิ์น้อย           | 181+000       | 184+000 |
|                                | ` `                                     |                        | นาโพธิ์               | 184+000       | 186+500 |
|                                |   | กุสุมาลย์              | กุสุมาลย์             | 186+500       | 194+000 |
|                                |   | โพธิไพศาล              | บ้านโนนรุ่งเรือง      | 194+800       | 196+400 |
|                                |   |                        | บ้านนิรมัย            | 196+400       | 198+490 |
| นครพนม³                        | เมือง นครพนม                            | วังตามัว               | โชคอำนวย              | 200+150       | 200+650 |
|                                |   |                        | โนนชมภู               | 204+400       | 205+010 |
|                                |   |                        | หนองแชง               | 206+650       | 207+675 |
|                                |   |                        | วังม่วง               | 207+675       | 208+115 |
|                                |   |                        | วังตามัว              | 209+050       | 209+980 |
|                                |   |                        | พรเจริญ               | 209+050       | 209+980 |
|                                |   | กุรุค                  | หนองหญ้าไซ            | 213+900       | 214+650 |
| รวม                            |   | 1 .14.1                | 7170107109101         |               |         |
| ๒ จังหวัด                      | ๖ อำเภอ                                 | ഒ๘ ตำบล                | ๓๗ หมู่บ้าน           | ๖๙.๘๔ กิโล    | เมตร    |
|                                |   | ทางหลว                 | งหมายเลข ๒๓           |               |         |
| a. ทางหลวงห                    | มายเลข ๒๓ ร้อยเอ็ด                      | _ เสลภูมิ (25.657 km   | ; 115+512 to 141+169) |               |         |
| ร้อยเอ็ด                       | ธวัชบุรี                                | นิเวศน์                | ประตูชัย              | 115+512       | 116+749 |
|                                |   |                        | นิคม                  | 116+749       | 120+612 |
|                                |   |                        | นิเวศน์               | 120+612       | 125+312 |
|                                |   | อุ่มเม้า               | อุ่มเม้า              | 125+312       | 126+112 |
|                                |   | ไพศาล                  | ฝางแดง                | 126+112       | 127+912 |
|                                |   |                        | ท่าบ่อ                | 127+912       | 128+812 |
|                                |   |                        | ดอนวัว                | 128+812       | 129+912 |
|                                |   |                        | หัวบ่อ                | 129+912       | 131+612 |
|                                | ทุ่งเขาหลวง                             | ทุ่งเขาหลวง            | หวายน้อย              | 131-+612      | 135+312 |
|                                | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | •                      | หวายลึม               | 135+312       | 138+112 |
|                                |   | มะบ้า                  | ท่าสะแบง              | 138+112       | 139+137 |
|                                | เสลภูมิ                                 | กลาง                   | ท่าไคร้               | 139+137       | 139+412 |
|                                |   |                        | กลาง (เทศบาล)         | 139+412       | 142+212 |
| b. ทางหลวงห                    | มายเลข ๒๓ เสลภูมิ                       | ยโสธร (29.4 km; 14     | 43+412 to 172+812)    |               |         |
| ยโสธร                          | เมืองยโสธร                              | ขวัญเมือง <sup>4</sup> | เสลภูมิ               | 142+212       | 142+412 |
|                                |   | เขวาั4                 | โนนยาง                | 151+762       | 153+652 |
|                                |   | เดิด                   | บ้านใหม่ชมพร          | 153+552       | 157+062 |
|                                |   | 35151                  | คำแดง                 | 157+062       | 159+112 |
|                                |   |                        | เชือก                 | 159+112       | 161+012 |
|                                |   |                        | เดิด                  | 161+012       | 163+832 |
|                                |   |                        | น้ำโพธิ์              | 163+832       | 164+912 |
|                                |   | ดู่ทุ่ง                | ดู่ทุ่ง               | 164+912       | 165+862 |
|                                |   | 3,14                   | คำบอน                 | 165+862       | 166+742 |
|                                |   |                        | หนองแสง               | 166+742       | 168+462 |
|                                |   | สำราญ                  | หนองนางตุ้ม           | 168+462       | 170+012 |
|                                |   | ea 19 19 ft            | บาก                   | 170+012       | 172+112 |
|                                |   |                        | เชียงหวาง             | 170+012       | 173+312 |
|                                |   |                        | สำราญ                 | 173+312       | 175+512 |
| รวม                            |   |                        | l ex 19 left          | 1707012       | 1707027 |
| <br>๒ จังหวัด                  | ๔ อำเภอ                                 | ๑๑ ตำบล                | 27 หมู่บ้าน           | ๕๕.๐๕๗ กม     |         |
|                                | C                                       | מטווע נטנט ן           | ่ ₹เทฟ์กเซ            | ี ๔๔.๐๔๗ ปม   | •       |
| รวมทั้งหมด<br>๔ <b>จังหวัด</b> | ๑๐ เมือง                                | ๒๙ ตำบล                | ๖๔ หมู่บ้าน           | ماسر باساسا د | 191     |
| CF AAAA AA                     | ดด เทยง                                 | เลย เกย                | โ ๑๕ มท์⊓ เท          | ୭୭୯.୯୯୩ ୧     | IN.     |

 จงหวด
 | ๑๐ เมอง
 | ๒๙ ตาบล
 | ๖๔ หมูบาน

 NOTE: ¹ ภายใต้ความรับผิดชอบของ แขวงทางหลวงสกลนคร ๒ (สว่างแดนดิน)

 ² ภายใต้ความรับผิดชอบของ แขวงทางหลวงนครพนม (ปลาปาก)

 ⁴ ภายใต้ความรับผิดชอบของ แขวงทางหลวงยโสธร (อาจสามารถ)

# ผู้ใดบ้างที่มีสิทธิได้รับความช่วยเหลือจากโครงการ

พื้นที่ในเขตทางหลวงถือเป็นพื้นที่ของทางราชการตั้งแต่ปี พ.ศ. ๒๕๐๙ (ทางหลวงหมายเลข ๒๒) และตั้งแต่ปี พ.ศ. ๒๕๑๐ (ทางหลวงหมายเลข ๒๓) ผู้ที่ใช้พื้นที่ของโครงการ โดยเฉพาะผู้ที่มีร้านค้า และผู้ทำนาในเขตทางหลวง ของทั้งสองเส้นทาง กรมทางหลวงจะได้พิจารณาให้ความช่วยเหลือตามสมควร และตามที่กฎหมายกำหนด

# วันสิ้นสุดการขึ้นทะเบียนของโครงการคืออะไร และเมื่อใดที่ถือเป็นวันสิ้นสุดการขึ้นทะเบียน ของโครงการ

วันสิ้นสุดการขึ้นทะเบียนของโครงการ คือ วันที่สุดท้ายที่นับผู้ใช้พื้นที่ก่อนหน้านั้น ว่าเป็นผู้ใช้พื้นที่ในโครงการ ซึ่งผู้มีชื่อดังกล่าวจะอยู่ข่ายที่ได้รับความช่วยเหลือตามที่กฎหมาย กำหนด ก่อนการเปิดพื้นที่เพื่อการก่อสร้างต่อไป วันสิ้นสุดการลงทะเบียนนี้ คือ วันที่ ๘ พฤษภาคม พ.ศ.๒๕๖๐ ซึ่งเป็นวันที่สินสุดการสำรวจรายการทรัพย์สิน และสำรวจเศรษฐกิจครัวเรือน ภายใต้การดำเนินการของแขวงทางหลวงจังหวัดที่เกี่ยวข้อง

# ผู้ที่ได้รับการขึ้นทะเบียนในโครงการ มีสิทธิที่จะได้รับความช่วยเหลืออะไรบ้าง?

รายละเอียดของผู้มีสิทธิประเภทต่าง ๆ อิงตาม สิ่งที่ได้รับผลกระทบจากโครงการนั้น บรรยายไว้ในตารางสิทธิของผู้ที่ได้รับผลกระทบในแผนโยกย้ายจัดสรร คือ

- 1. ครอบครัวที่สูญเสียโอกาสในการใช้ที่ดินเพื่อการทำนาหรือกสิกรรมอื่น จะมีสิทธิในการร่วมโครงการพัฒนาชีวิตความเป็นอยู่ หรือโครงการส่งเสริมรายได้ ซึ่งรัฐได้จัดไว้ในท้องถิ่น ตามความเหมาะสม
- 2. ผู้ที่ต้องย้ายร้านค้าออกจากเขตทางจะได้รับการอำนวยความสะดวกในการย้ายร้านค้า ออกจากเขตทางหลวง
- 3. ครอบครัวผู้ด้อยโอกาสและผู้มีผลกระทบมากจะมีสิทธิในการเข้ารวมโครงการยกระดับรายได้ และชีวิตความเป็นอยู่ของรัฐในท้องถิ่น และหากต้องการ จะมีสิทธิลำดับต้น ในการทำงานกรรมกรไร้ฝีมือ กับผู้รับเหมาในโครงการ

### การร้องทุกข์ และการแก้ไข ทำอย่างไร?

ในระยะการก่อสร้างนายช่างโครงการของกรมทางหลวงเป็นผู้รับเรื่องร้องทุกข์ และดำเนินการแก้ไข แต่หลังจากการก่อสร้างสำเร็จและถนนถูกใช้งานกรมทางหลวงจะแต่งตั้ง พนักงานของหมวดทางหลวงเป็นผู้รับผิดชอบต่อไป

ประชาชนสามารถสอบถามข้อมูล หรือร้องทุกข์ต่อนายช่างของโครงการได้ทุกเมื่อ ในขณะเดียวกันประชาชนอาจร้องเรียนผ่านช่องทางอื่น เช่น กรรมการหมู่บ้าน เจ้าหน้าที่ของหมวดการทาง ศูนย์ดำรงธรรม หรือ ผ่านผู้รับเหมาในโครงการ ก็ได้ แต่หากร้องทุกข์กับนายช่างของโครงการโดยตรงจะได้รับการตอบสนองรวดเร็วกว่า

เมื่อมีการร้องทุกข์เจ้าหน้าที่ผู้รับผิดชอบจะบันทึกข้อมูลและลงทะเบียนไว้เพื่อการอ้างอิง เป็นต้นว่า

- I. วันที่ร้องเรียน
- II. รายละเอียดของผู้ร้องเรียน เช่น ชื่อและรายละเอียดในการติดต่อกลับ
- III. รายละเอียดของการร้องเรียน
- IV. การแก้ไขปัญหาและผู้รับผิดชอบ

หลังจากนั้นนายช่างของโครงการจะได้ติดต่อผู้ร้องทุกข์ภายใน ๗ วันทำการ เพื่อสอบถามและพิจารณาดำเนินการแก้ไข ถ้าหากว่าการแก้ไขยังไม่เป็นที่พอใจ ผู้ร้องเรียน สามารถร้องทุกข์ต่อคณะจัดตั้งของรัฐได้ต่อไป

ข้อร้องเรียนที่ผ่านคณะจัดตั้งของรัฐ จะถูกส่งมายังนายช่างโครงการเพื่อคัดกรองและพิจารณา โดยนายช่างโครงการจะเป็นผู้ประสานงานปรึกษาหารือกับคณะกรรมการหมู่บ้าน และตัวแทน หรือผู้นำชุมชน ร่วมกับผู้ร้องเรียน เพื่อดำเนินการแก้ไข โดยทั่วไปการแก้ไขปัญหาจะสิ้นสุด ในระดับหมู่บ้านนี้

แต่หากผู้ร้องเรียนยังไม่พอใจ ผู้ร้องเรียนสามารถยื่นเรื่องต่อศูนย์ดำรงธรรมระดับจังหวัดได้ เป็นขั้นต่อไป โดยศูนย์ดำรงธรรม จะเชิญผู้ร้องเรียน ตัวแทนของผู้บริหารโครงการ หรือตัวแทนหมวดการทาง และหรือ ผู้รับเหมาของโครงการเพื่อร่วมแก้ไขปัญหา

หลังจากขั้นตอนทั้งหมดที่กล่าวมาข้างตัน ถ้าผู้ร้องเรียนยังไม่พอใจก็สามารถยื่นเรื่องต่อ ศาลยุติธรรมได้ต่อไป

# หากมีข้อสงสัย จะติดต่อกับโครงการได้อย่างไร?

| โปรดติดต่อ            |
|-----------------------|
| ชื่อ:                 |
| ภาระที่ได้รับมอบหมาย: |
| ที่ตั้ง:              |
| หมายเลขโทรศัพท์:      |
| หมายเลขโทรสาร:        |
| อีเมล์:               |