

## ***Appendix 1***

### ***PDM1, PDM2, PDM3 and PDM4***



**Project Design Matrix (PDM)**  
**Project Title: The Project on Capacity Development in Disaster<sup>1</sup> Management (Phase-2)** Period: 2010 - 2014 (4 years)  
 Implementing Agency: Department of Disaster Prevention and Mitigation: DDPM, Co-Implementing Agency: Ministry of Education: MOE  
 Target Groups: (direct) DDPM staff at central and provincial levels, (indirect) community people in the target areas.  
 Target Provinces: (to be selected. Two provinces as “model province A” and “model province B”)

| Narrative Summary  | Objectively Verifiable Indicators  | Means of Verification  | Important Assumptions  |
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| <p><b>Overall Goal (in 3-5 years after the Project ends):</b><br/>                     Implementation of disaster risk management activities is improved and scaled up.</p>  | <ol style="list-style-type: none"> <li>Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in at least Y provinces other than the target provinces.</li> <li>Evacuation plans are prepared by Y communities (other than the Project target communities) with support of DDPM Regional Centers and Provincial offices.</li> <li>Disaster education is implemented by at least Y schools.</li> </ol>                                 | <ol style="list-style-type: none"> <li>Provincial Disaster Prevention and Mitigation Plans and Action Plans</li> <li>Evacuation plans</li> <li>Record of schools</li> </ol>  |  |
| <p><b>Project Purpose (by the end of the Project)</b><br/>                     Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, Community Based Disaster Risk Management: CBDRM and disaster education, collaborating with concerned agencies, provincial and local levels.</p> | <ol style="list-style-type: none"> <li>Plans for up-scaling are included in the National Disaster Prevention and Mitigation Action Plan.</li> <li>Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the target provinces.</li> </ol>   | Disaster Prevention and Mitigation Action Plans  | Mission and responsibility of DDPM regarding disaster management is maintained by law. |
| <p><b>Outputs</b><br/> <b>&lt;Task force – Disaster Management Planning&gt;</b><br/>                     1. Disaster Prevention and Mitigation Action Plans with considerations for vulnerable people are formulated for national, provincial and local authorities<sup>2</sup> (in the target provinces).</p>           | <ol style="list-style-type: none"> <li>Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (target provinces) and local levels (X local authorities).</li> </ol>  | 1 Disaster Prevention and Mitigation Action Plans at national, provincial and local levels   |  |
| <p><b>&lt;Task force - CBDRM&gt;</b><br/>                     2. Capacity of DDPM staff as facilitators on implementation of Community Based Disaster Risk Management (CBDRM) is enhanced.</p>   | <ol style="list-style-type: none"> <li>2-1 CBDRM manuals and facilitator’s guide developed by the JICA Project Phase I (for facilitators and for communities) are improved and are utilized in the target communities.</li> <li>2-2 Disaster training and educational materials (for facilitators and for communities) are improved and are utilized in the target communities.</li> <li>2-3 CBDRM action plan for implementation is developed by DDPM.</li> </ol> | <ol style="list-style-type: none"> <li>2-1-1 CBDRM manuals and activity reports</li> <li>2-1-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-2-1 Educational materials</li> <li>2-2-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-3 CBDRM implementation action plan and activity reports</li> </ol> |  |

<sup>1</sup> “Disaster” means “natural disaster” in this PDM. Man-made disasters such as fire and chemical disasters are not included.  
<sup>2</sup> “Local authorities” refers to sub-district (or Tambon) administrations, municipalities, or other local administrations by law.

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| <p>&lt;Task force – Disaster Management Training &gt;<br/>3. Training curriculum at DPMA is improved.</p>  | <p>3-1 At least one curriculum on disaster management on natural disaster (flood, flash flood and mud flow) for DDPM staff is improved.</p>  | <p>3-1 Curriculum</p>  |   |
| <p>&lt;Task force – Disaster Education&gt;<br/>4. Based on the Natural disaster preparedness educational curriculum, schools have improved preparedness for disaster.</p>  | <p>4-1 At least three schools in the target provinces implement disaster education on natural disasters as model schools supported by MOE headquarters and the first model schools from Phase I.<br/>4-2 100 teachers from natural disaster prone areas are trained on disaster education.</p> | <p>4-1 Record of model schools observation of classes<br/>4-2 Records of training, workshops and seminars (Number of participants, content of training, date, level of achievement, etc.)</p>  |   |
| <p><b>Activities</b><br/>0-0 DDPM, in consultation with the Japanese experts, selects target areas:<br/>➢ Model province A, Model community (MOOBAN) a1 and a2 in the model province A,<br/>➢ Model province B, Model community (MOOBAN) b1 in the model province B.<br/><b>&lt;TF Disaster Management Planning&gt;</b><br/>1-1 TF Disaster Management Planning designs capacity development plan on their activities and monitoring/ evaluation.<br/>1-2 TF conduct training for 300 DDPM staff at central, regional and provincial levels how to formulate disaster prevention and mitigation plans and action plans, focusing on priority items.<br/>1-3 DDPM staff at central and provincial levels review and/or develop provincial disaster prevention and mitigation plans, focusing on priority items, in consideration of vulnerable people for disasters, for the model province A, followed by the model province B.<br/>1-4 DDPM staff at central and provincial levels prepares national and provincial disaster prevention and mitigation action plans, and target local authorities in target provinces prepare local disaster prevention and mitigation action plans, focusing on priority items, in which method of up-scaling, staffing and budget are identified and incorporated in the model province A, followed by the model province B.<br/>1-5 TF conducts table-top exercises to revise disaster prevention and mitigation plans and action plans with concerned organizations.<br/>1-6 TF and concerned provincial staff modify disaster prevention and mitigation plans and action plans, based on the experience of table top exercises.<br/>1-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.<br/><b>&lt;TF CBDRM&gt;</b><br/>2-1 TF-CBDRM designs capacity development plan on TF-CBDRM activities and monitoring/evaluation.<br/>2-2 TF reviews and revises CBDRM manuals and facilitator’s guide seeking comments from 76 provinces and tests them at the model community (MOOBAN) a1 and finalizes them for publication.</p> |  | <p><b>Inputs</b><br/><b>&lt;Thai side&gt;</b><br/>Counterparts<br/>Project Director<br/>Project Manager<br/>Task force members<br/>Administrative staff<br/>Project office and facilities at DDPM<br/>Working space at MOE<br/>Operational costs<br/><b>&lt;Japanese Side&gt;</b><br/>Experts<br/>Disaster Management Plan<br/>Disaster Management Institution<br/>Sediment Disaster Management<br/>Flood Management<br/>Community Based Disaster Risk Management<br/>Disaster Education<br/>Counterpart Training in Japan<br/>Operational costs</p> | <p><b>Preconditions</b><br/>Human resources and budget necessary for the implementation of the Project are provided by the Thai side.</p> |

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|  | <p>2-3 TF conducts training for at least 80 DDPM staff at central, regional and provincial levels to facilitate CBDRM.</p> <p>2-4 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community a1 in collaboration with the local model school.</p> <p>2-5 Trained DDPM provincial staff in the model province B facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community b1 in collaboration with the local model school.</p> <p>2-6 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community a2 in the model province A in collaboration with the local model school.</p> <p>2-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p><b>&lt;TF Disaster Management Training&gt;</b></p> <p>3-1 TF-Disaster Management Training designs a capacity development plan for its activities and monitoring/evaluation.</p> <p>3-2 TF develops guidelines for evaluation and monitoring of training.</p> <p>3-3 TF conducts needs assessment for training in collaboration with other task forces.</p> <p>3-4 TF revises standard disaster management curriculum in DPMA training courses on flood, flash flood and mud flow.</p> <p>3-5 TF, in collaboration with concerned organizations, develops training modules and materials to synchronize training curriculum on disaster management (flood, flash flood and mud flow), CBDRM.</p> <p>3-6 TF, in collaboration with concerned organizations, train master trainers for DDPM staff.</p> <p>3-7 Master trainers train 100 DDPM staff of disaster management on flood, flash flood and mud flow.</p> <p>3-8 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> <p><b>&lt;TF Disaster Education&gt;</b></p> <p>4-1 DDPM and Ministry of Education discuss and agree on the roles of each agency to implement TF-disaster education activities.</p> <p>4-2 TF in collaboration with OBEC develops model curriculum of disaster education in schools on flood, flash flood and mudflow.</p> <p>4-3 TF in collaboration with OBEC modifies textbooks and teachers' guide.</p> <p>4-4 TF selects one model school a1 in the model community a1, one model school a2 in the model community a2 in the model province A and one model school b1 in the model community b1 in the model province B for planning curriculum of school disaster education and conducting model lessons.</p> <p>4-5 TF in collaboration with MOE trains 40 master teachers.</p> <p>4-6 Master teachers train at least 100 teachers how to teach disaster education at schools in cooperation with local</p> |
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|  | <p>communities.</p> <p>4-7 Master teachers conduct model classes for disaster education at the model school a1 in the model community (MOOBAN) a1, followed by one model school a2 in model community a2 in model province A and one model school b1 in model community b1 in model province B.</p> <p>4-8 Trained teachers by Master teachers conduct disaster education at their own schools.</p> <p>4-9 TF in collaboration with MOE develops one model school as information center of disaster education, followed by two model schools in two provinces.</p> <p>4-10 TF in collaboration with OBEC reviews the process and revises curriculum.</p> <p>4-11 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> |  |
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## Project Design Matrix (PDM)

# Version 2

(Version 2)

**Project Title: The Project on Capacity Development in Disaster Management (Phase-2)** Period: 2010 - 2014 (4 years)  
 Implementing Agency: Department of Disaster Prevention and Mitigation: DDPM, Co-Implementing Agency: Ministry of Education: MOE  
 Target Groups: (direct) DDPM staff at central and provincial levels. (indirect) staff of local authorities and community people in the target areas.  
 Target Provinces: Lampang and Lamphun Provinces, additionally CBDRM and disaster education is conducted in Nakhon Si Thammarat Province

| Narrative Summary  | Objectively Verifiable Indicators  | Means of Verification   | Important Assumptions  |
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| <p><b>Overall Goal (in 3-5 years after the Project ends):</b><br/>                     Implementation of disaster risk management activities is improved and scaled up.</p>  | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in all <b>76</b> provinces and revised (if necessary).</li> <li>2. All <b>76</b> provinces conduct table-top exercise (TTX) at least one district (Amphur) together with the province to verify the disaster prevention and mitigation action plan at local level.</li> <li>3. Evacuation plans are prepared by more than <b>100</b> communities every year (other than the Project target communities) with support of DDPM Regional Centers and Provincial offices.</li> <li>4. Disaster education is implemented by at least four schools. Each school functions as a learning center at the initiative of ESA Office in four major regions in Thailand, respectively.</li> </ol> | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans</li> <li>2. Evaluation report of TTX</li> <li>3. Evacuation plans</li> <li>4. Record of workshop report.</li> </ol>  |  |
| <p><b>Project Purpose (by the end of the Project)</b><br/>                     Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, Community Based Disaster Risk Management: CBDRM and disaster education, collaborating with concerned agencies, provincial and local levels.</p> | <ol style="list-style-type: none"> <li>1. Plans for up-scaling are included in the National Disaster Prevention and Mitigation Action Plan.</li> <li>2. Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the target provinces.</li> </ol>   | Disaster Prevention and Mitigation Action Plans   | Mission and responsibility of DDPM regarding disaster management is maintained by law. |
| <p><b>Outputs</b><br/>                     &lt;Task force – Disaster Management Planning&gt;<br/>                     1. Disaster Prevention and Mitigation Action Plans with considerations for vulnerable people are formulated for national, provincial and local authorities (in the target provinces).</p>          | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (target provinces) and local levels (At least <b>80</b> local authorities or 80% in Lampang and <b>45</b> local authorities or 80% in Lamphun).</li> </ol>  | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans at national, provincial and local levels</li> </ol>   |  |
| <p>&lt;Task force - CBDRM&gt;<br/>                     2. Capacity of DDPM staff as facilitators on implementation of Community Based Disaster Risk Management (CBDRM) is enhanced.</p>  | <ol style="list-style-type: none"> <li>2-1 CBDRM manuals and facilitator's guide developed by the JICA Project Phase I (for facilitators and for communities) are improved and are utilized in the target communities.</li> <li>2-2 Disaster training and educational materials (for facilitators and for communities) are improved and are utilized in the target communities.</li> <li>2-3 CBDRM action plan for implementation is developed by</li> </ol>   | <ol style="list-style-type: none"> <li>2-1-1 CBDRM manuals and activity reports</li> <li>2-1-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-2-1 Educational materials</li> <li>2-2-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-3 CBDRM implementation action plan and</li> </ol> |  |

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| <p>&lt;Task force – Disaster Management Training &gt;<br/>3. Training curriculum at DPMA is improved.</p>   | <p>DDPM.</p> <p>3-1 At least one curriculum on disaster management on natural disaster (flood, flash flood and mud flow) for DDPM staff is improved.</p>  | <p>activity reports</p> <p>3-1 Curriculum</p>  |  |
| <p>&lt;Task force – Disaster Education&gt;<br/>4. Based on the Natural disaster preparedness educational curriculum, schools have improved preparedness for disaster.</p>   | <p>4-1 At least three schools in the target provinces implement disaster education on natural disasters as model schools supported by MOE headquarters and the first model schools from Phase I.</p> <p>4-2 100 teachers from natural disaster prone areas are trained on disaster education.</p> | <p>4-1 Record of model schools observation of classes</p> <p>4-2 Records of training, workshops and seminars (Number of participants, content of training, date, level of achievement, etc.)</p>   |  |
| <p><b>Activities</b></p> <p>0-0 DDPM, in consultation with the Japanese experts, selects target areas:</p> <ul style="list-style-type: none"> <li>➢ Model province A, Model community (MOOBAN) a1 and a2 in the model province A,</li> <li>➢ Model province B, Model community (MOOBAN) b1 in the model province B.</li> </ul> <p>&lt;TF Disaster Management Planning&gt;</p> <p>1-1 TF Disaster Management Planning designs capacity development plan on their activities and monitoring/ evaluation.</p> <p>1-2 TF conduct training for 300 DDPM staff at central, regional and provincial levels how to formulate disaster prevention and mitigation plans and action plans, focusing on priority items.</p> <p>1-3 DDPM staff at central and provincial levels review and/or develop provincial disaster prevention and mitigation plans, focusing on priority items, in consideration of vulnerable people for disasters, for the model province A, followed by the model province B.</p> <p>1-4 DDPM staff at central and provincial levels prepares national and provincial disaster prevention and mitigation action plans, and target local authorities in target provinces prepare local disaster prevention and mitigation action plans, focusing on priority items, in which method of up-scaling, staffing and budget are identified and incorporated in the model province A, followed by the model province B.</p> <p>1-5 TF conducts table-top exercises to revise disaster prevention and mitigation plans and action plans with concerned organizations.</p> <p>1-6 TF and concerned provincial staff modify disaster prevention and mitigation plans and action plans, based on the experience of table top exercises.</p> <p>1-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF CBDRM&gt;</p> <p>2-1 TF-CBDRM designs capacity development plan on TF-CBDRM activities and monitoring/evaluation.</p> <p>2-2 TF reviews and revises CBDRM manuals and facilitator’s guide seeking comments from 76 provinces and tests them at the model community (MOOBAN) a1 and finalizes them for publication.</p> |   | <p><b>Inputs</b></p> <p>&lt;Thai side&gt;</p> <p>Counterparts<br/>Project Director<br/>Project Manager<br/>Task force members<br/>Administrative staff</p> <p>Project office and facilities at DDPM<br/>Working space at MOE</p> <p>Operational costs</p> <p>&lt;Japanese Side&gt;</p> <p>Experts<br/>Disaster Management Plan<br/>Disaster Management Institution<br/>Sediment Disaster Management<br/>Flood Management<br/>Community Based Disaster Risk Management<br/>Disaster Education</p> <p>Counterpart Training in Japan</p> <p>Operational costs</p> | <p><b>Preconditions</b></p> <p>Human resources and budget necessary for the implementation of the Project are provided by the Thai side.</p> |



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|  | <p>2-3 TF conducts training for at least 80 DDPM staff at central, regional and provincial levels to facilitate CBDRM.</p> <p>2-4 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community (MOOBAN) a1 in collaboration with the local model school.</p> <p>2-5 Trained DDPM provincial staff in the model province B facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community b1 in collaboration with the local model school.</p> <p>2-6 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community a2 in the model province A in collaboration with the local model school.</p> <p>2-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF Disaster Management Training&gt;</p> <p>3-1 TF-Disaster Management Training designs a capacity development plan for its activities and monitoring/evaluation.</p> <p>3-2 TF develops guidelines for evaluation and monitoring of training.</p> <p>3-3 TF conducts needs assessment for training in collaboration with other task forces.</p> <p>3-4 TF revises standard disaster management curriculum in DPMA training courses on flood, flash flood and mud flow.</p> <p>3-5 TF, in collaboration with concerned organizations, develops training modules and materials to synchronize training curriculum on disaster management (flood, flash flood and mud flow), CBDRM.</p> <p>3-6 TF, in collaboration with concerned organizations, train master trainers for DDPM staff.</p> <p>3-7 Master trainers train 100 DDPM staff of disaster management on flood, flash flood and mud flow.</p> <p>3-8 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF Disaster Education&gt;</p> <p>4-1 DDPM and Ministry of Education discuss and agree on the roles of each agency to implement TF-disaster education activities.</p> <p>4-2 TF in collaboration with OBEC develops model curriculum of disaster education in schools on flood, flash flood and mudflow.</p> <p>4-3 TF in collaboration with OBEC modifies textbooks and teachers' guide.</p> <p>4-4 TF selects one model school a1 in the model community a1, one model school a2 in the model community a2 in the model province A and one model school b1 in the model community b1 in the model province B for planning curriculum of school disaster education and conducting model lessons.</p> <p>4-5 TF in collaboration with MOE trains 40 master teachers.</p> <p>4-6 Master teachers train at least 100 teachers how to teach disaster education at schools in cooperation with local communities.</p> <p>4-7 Master teachers conduct model classes for disaster education at the model school a1 in the model community</p> |
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|  | <p>(MOOBAN) a1, followed by one model school a2 in model community a2 in model province A and one model school b1 in model community b1 in model province B.</p> <p>4-8 Trained teachers by Master teachers conduct disaster education at their own schools.</p> <p>4-9 TF in collaboration with MOE develops one model school as information center of disaster education, followed by two model schools in two provinces.</p> <p>4-10 TF in collaboration with OBEC reviews the process and revises curriculum.</p> <p>4-11 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> |
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## Project Design Matrix (PDM)

# Version 3

(Version 3)

**Project Title: The Project on Capacity Development in Disaster Management (Phase-2)** Period: 2010 - 2014 (4 years)  
 Implementing Agency: Department of Disaster Prevention and Mitigation: DDPM, Co-Implementing Agency: Ministry of Education: MOE  
 Target Groups: (direct) DDPM staff at central and provincial levels; (indirect) staff of local authorities and community people in the target areas.  
 Target Provinces: Lampang and Lamphun Provinces, additionally CBDRM and disaster education is conducted in Nakhon Si Thammarat Province

| Narrative Summary  | Objectively Verifiable Indicators  | Means of Verification   | Important Assumptions  |
|--|--|---|--|
| <p><b>Overall Goal (in 3-5 years after the Project ends):</b><br/>                     Implementation of disaster risk management activities is improved and scaled up.</p>  | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in all <b>76</b> provinces and revised (if necessary).</li> <li>2. All <b>76</b> provinces conduct table-top exercise (TTX) at least one district (Amphur) together with the province to verify the disaster prevention and mitigation action plan at local level.</li> <li>3. Evacuation plans are prepared by more than <b>100</b> communities every year (other than the Project target communities) with support of DDPM Regional Centers and Provincial offices.</li> <li>4. Disaster education is implemented by at least four schools. Each school functions as a learning center at the initiative of ESA Office in four major regions in Thailand, respectively.</li> </ol> | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans</li> <li>2. Evaluation report of TTX</li> <li>3. Evacuation plans</li> <li>4. Record of workshop report.</li> </ol>  |  |
| <p><b>Project Purpose (by the end of the Project)</b><br/>                     Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, Community Based Disaster Risk Management: CBDRM and disaster education, collaborating with concerned agencies, provincial and local levels.</p> | <ol style="list-style-type: none"> <li>1. Plans for up-scaling are included in the National Disaster Prevention and Mitigation Action Plan.</li> <li>2. Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the target provinces.</li> </ol>   | Disaster Prevention and Mitigation Action Plans   | Mission and responsibility of DDPM regarding disaster management is maintained by law. |
| <p><b>Outputs</b><br/>                     &lt;Task force – Disaster Management Planning&gt;<br/>                     1. Disaster Prevention and Mitigation Action Plans with considerations for vulnerable people are formulated for national, provincial and local authorities (in the target provinces).</p>          | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (target provinces) and local levels (At least <b>80</b> local authorities or <b>80%</b> in Lampang and <b>45</b> local authorities or <b>80%</b> in Lamphun).</li> </ol>  | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans at national, provincial and local levels</li> </ol>   |  |
| <p>&lt;Task force - CBDRM&gt;<br/>                     2. Capacity of DDPM staff as facilitators on implementation of Community Based Disaster Risk Management (CBDRM) is enhanced.</p>  | <ol style="list-style-type: none"> <li>2-1 CBDRM manuals and facilitator's guide developed by the JICA Project Phase I (for facilitators and for communities) are improved and are utilized in the target communities.</li> <li>2-2 Disaster training and educational materials (for facilitators and for communities) are improved and are utilized in the target communities.</li> </ol>   | <ol style="list-style-type: none"> <li>2-1-1 CBDRM manuals and activity reports</li> <li>2-1-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-2-1 Educational materials</li> <li>2-2-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> </ol> |  |

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| <p>&lt;Task force – Disaster Management Training &gt;<br/>3. Training curriculum at DPMA is improved.</p>   | <p>2-3 CBDRM action plan for implementation is developed by DDPM.</p> <p>3-1 At least one curriculum on disaster management on natural disaster (flood, flash flood and mud flow) for DDPM staff is improved.</p>   | <p>2-3 CBDRM implementation action plan and activity reports</p>   |  |
| <p>&lt;Task force – Disaster Education&gt;<br/>4. Based on the Natural disaster preparedness educational curriculum, schools have improved preparedness for disaster.</p>   | <p>4-1 At least three schools in the target provinces implement disaster education on natural disasters as model schools supported by MOE headquarters and the first model schools from Phase I.</p> <p>4-2 100 teachers from natural disaster prone areas are trained on disaster education.</p>   | <p>3-1 Curriculum</p> <p>4-1 Record of model schools observation of classes</p> <p>4-2 Records of training, workshops and seminars (Number of participants, content of training, date, level of achievement, etc.)</p>           |  |
| <p>&lt;Task force – Flash Flood Risk Management&gt;<br/>5. Knowledge and technical capacity of DDPM on hazard mapping, early warning system and design of structural measures are enhanced.</p>   | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping are developed.</p> <p>5-2 Manuals on early warning system and structural measures for flood mitigation and prevention are developed.</p> <p>5-3 Training targeting on all of 18 DPM regional centers using the above manuals.</p>  | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping</p> <p>5-2 Manuals on early warning system and structural measures.</p> <p>5-3 Record of training (number of regional centers participating in the trainings)</p> |  |
| <p><b>Activities</b></p> <p>0-0 DDPM, in consultation with the Japanese experts, selects target areas:</p> <ul style="list-style-type: none"> <li>➢ Model province A, Model community (MOOBAN) a1 and a2 in the model province A,</li> <li>➢ Model province B, Model community (MOOBAN) b1 in the model province B.</li> </ul> <p>&lt;TF Disaster Management Planning&gt;</p> <p>1-1 TF Disaster Management Planning designs capacity development plan on their activities and monitoring/ evaluation.</p> <p>1-2 TF conduct training for 300 DDPM staff at central, regional and provincial levels how to formulate disaster prevention and mitigation plans and action plans, focusing on priority items.</p> <p>1-3 DDPM staff at central and provincial levels review and/or develop provincial disaster prevention and mitigation plans, focusing on priority items, in consideration of vulnerable people for disasters, for the model province A, followed by the model province B.</p> <p>1-4 DDPM staff at central and provincial levels prepares national and provincial disaster prevention and mitigation action plans, and target local authorities in target provinces prepare local disaster prevention and mitigation action plans, focusing on priority items, in which method of up-scaling, staffing and budget are identified and incorporated in the model province A, followed by the model province B.</p> <p>1-5 TF conducts table-top exercises to revise disaster prevention and mitigation plans and action plans with concerned</p> | <p><b>Inputs</b></p> <p>&lt;Thai side&gt;</p> <ul style="list-style-type: none"> <li>Counterparts</li> <li>Project Director</li> <li>Project Manager</li> <li>Task force members</li> <li>Administrative staff</li> </ul> <p>Project office and facilities at DDPM</p> <p>Working space at MOE</p> <p>Operational costs</p> <p>&lt;Japanese Side&gt;</p> <ul style="list-style-type: none"> <li>Experts</li> <li>Disaster Management Plan</li> <li>Disaster Management Institution</li> <li>Sediment Disaster Management</li> <li>Flood Management</li> </ul> | <p><b>Preconditions</b></p> <p>Human resources and budget necessary for the implementation of the Project are provided by the Thai side.</p>   |  |

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| <p>organizations.</p> <p>1-6 TF and concerned provincial staff modify disaster prevention and mitigation plans and action plans, based on the experience of table top exercises.</p> <p>1-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF CBDRM&gt;</p> <p>2-1 TF-CBDRM designs capacity development plan on TF-CBDRM activities and monitoring/evaluation.</p> <p>2-2 TF reviews and revises CBDRM manuals and facilitator's guide seeking comments from 76 provinces and tests them at the model community (MOOBAN) a1 and finalizes them for publication.</p> <p>2-3 TF conducts training for at least 80 DDPM staff at central, regional and provincial levels to facilitate CBDRM.</p> <p>2-4 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community (MOOBAN) a1 in collaboration with the local model school.</p> <p>2-5 Trained DDPM provincial staff in the model province B facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community b1 in collaboration with the local model school.</p> <p>2-6 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community a2 in the model province A in collaboration with the local model school.</p> <p>2-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF Disaster Management Training&gt;</p> <p>3-1 TF-Disaster Management Training designs a capacity development plan for its activities and monitoring/evaluation.</p> <p>3-2 TF develops guidelines for evaluation and monitoring of training.</p> <p>3-3 TF conducts needs assessment for training in collaboration with other task forces.</p> <p>3-4 TF revises standard disaster management curriculum in DPMA training courses on flood, flash flood and mud flow.</p> <p>3-5 TF, in collaboration with concerned organizations, develops training modules and materials to synchronize training curriculum on disaster management (flood, flash flood and mud flow), CBDRM.</p> <p>3-6 TF, in collaboration with concerned organizations, train master trainers for DDPM staff.</p> <p>3-7 Master trainers train 100 DDPM staff of disaster management on flood, flash flood and mud flow.</p> <p>3-8 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF Disaster Education&gt;</p> <p>4-1 DDPM and Ministry of Education discuss and agree on the roles of each agency to implement TF-disaster education activities.</p> | <p>Community Based Disaster Risk Management<br/>Disaster Education</p> <p>Counterpart Training in Japan</p> <p>Operational costs</p> |  |
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|  | <p>4-2 TF in collaboration with OBEC develops model curriculum of disaster education in schools on flood, flash flood and mudflow.</p> <p>4-3 TF in collaboration with OBEC modifies textbooks and teachers' guide.</p> <p>4-4 TF selects one model school a1 in the model community a1, one model school a2 in the model community a2 in the model province A and one model school b1 in the model community b1 in the model province B for planning curriculum of school disaster education and conducting model lessons.</p> <p>4-5 TF in collaboration with MOE trains 40 master teachers.</p> <p>4-6 Master teachers train at least 100 teachers how to teach disaster education at schools in cooperation with local communities.</p> <p>4-7 Master teachers conduct model classes for disaster education at the model school a1 in the model community (MOOBAN) a1, followed by one model school a2 in model community a2 in model province A and one model school b1 in model community b1 in model province B.</p> <p>4-8 Trained teachers by Master teachers conduct disaster education at their own schools.</p> <p>4-9 TF in collaboration with MOE develops one model school as information center of disaster education, followed by two model schools in two provinces.</p> <p>4-10 TF in collaboration with OBEC reviews the process and revises curriculum.</p> <p>4-11 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> <p><b>&lt;TF Flash Flood Risk Management&gt;</b></p> <p>5-1 TF designs capacity development plan on its activities and monitoring/evaluation.</p> <p>5-2 TF selects one sub-basin model site in Lampang or Lamphun province based on GIS base risk area maps which are being prepared by DDPM..</p> <p>5-3 TF prepares manuals for rainfall / flood analysis and hazard mapping through the process of the practical training taking the model site as an example.</p> <p>5-4 TF prepares manuals for improvement of early warning system and for evaluation of structural measures, in which the result of 5-3 will be functionally utilized.</p> <p>5-5 TF conducts training on hazard mapping, early warning system and structural measures targeting DPM regional centers using the above manuals.</p> |
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**Project Design Matrix (PDM)**

**Project Title: The Project on Capacity Development in Disaster Management (Phase-2)** Period: 2010 - 2014 (4 years)

Implementing Agency: Department of Disaster Prevention and Mitigation: DDPM, Co-Implementing Agency: Ministry of Education: MOE

Target Groups: (direct) DDPM staff at central and provincial levels; (indirect) staff of local authorities and community people in the model areas.

Target Provinces: Lamphun and Lamphun Provinces, additionally CBDRM and disaster education is conducted in Nakhon Si Thammarat and Other Provinces

**Version 4**

(Version 4)

| Narrative Summary   | Objectively Verifiable Indicators   | Means of Verification   | Important Assumptions  |
|---|---|---|--|
| <p><b>Overall Goal (in 3-5 years after the Project ends):</b><br/>Implementation of disaster risk management activities is improved and scaled up.</p>  | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in all 76 provinces and BMA, and revised (if necessary).</li> <li>2. All 76 provinces and BMA conduct table-top exercise (TTX) at least one municipality/SAO (Tedsabaan/Ooborot) together with the province to verify the disaster prevention and mitigation action plan at local level.</li> <li>3. Evacuation plans are prepared by more than 100 communities every year (other than the Project model communities) with support of DPM Regional Centers and Provincial offices.</li> <li>4. Disaster education is implemented by at least four schools. Each school functions as a learning center at the initiative of ESA Office in four major regions in Thailand, respectively.</li> </ol> | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans</li> <li>2. Evaluation report of TTX</li> <li>3. Evacuation plans</li> <li>4. Record of workshop report.</li> </ol>  |  |
| <p><b>Project Purpose (by the end of the Project)</b><br/>Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, Community Based Disaster Risk Management: CBDRM and disaster education, collaborating with concerned agencies, provincial and local levels.</p> | <ol style="list-style-type: none"> <li>1. Plans for up-scaling are included in the National Disaster Prevention and Mitigation Action Plan.</li> <li>2. Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the model provinces.</li> </ol>   | Disaster Prevention and Mitigation Action Plans   | Mission and responsibility of DDPM regarding disaster management is maintained by law. |
| <p><b>Outputs</b><br/>&lt;Task force – Disaster Management Planning&gt;<br/>1. Disaster Prevention and Mitigation Action Plans with considerations for vulnerable people are formulated for national, provincial and local authorities (in the model provinces).</p>                                | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (model provinces) and local levels (At least 80 local authorities or 80% in Lamphun and 45 local authorities or 80% in Lamphun).</li> </ol>  | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans at national, provincial and local levels</li> </ol>   |  |
| <p>&lt;Task force - CBDRM&gt;<br/>2. Capacity of DDPM staff as facilitators on implementation of Community Based Disaster Risk Management (CBDRM) is enhanced.</p>  | <ol style="list-style-type: none"> <li>2-1 CBDRM manuals and facilitator's guide developed by the JICA Project Phase 1 (for facilitators and for communities) are improved and are utilized in the model communities.</li> <li>2-2 Disaster training and educational materials (for facilitators and for communities) are improved and are utilized in the model communities.</li> <li>2-3 CBDRM action plan for implementation is developed by</li> </ol>  | <ol style="list-style-type: none"> <li>2-1-1 CBDRM manuals and activity reports</li> <li>2-1-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-2-1 Educational materials</li> <li>2-2-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-3 CBDRM implementation action plan and</li> </ol> |  |

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|  | DDPM.   | activity reports   |  |
| <p>&lt;Task force – Disaster Management Training &gt;<br/>3. Training curriculum at DPMA is improved.</p>  | <p>3-1 At least one curriculum on disaster management on natural disaster (flood, flash flood and mud flow) for DDPM staff is improved.</p>   | <p>3-1 Curriculum</p>  |  |
| <p>&lt;Task force – Disaster Education&gt;<br/>4. Based on the Natural disaster preparedness educational curriculum, schools have improved preparedness for disaster.</p>  | <p>4-1 At least three schools in the model provinces implement disaster education on natural disasters as model schools supported by MOE headquarters and the first model schools from Phase I.</p> <p>4-2 100 teachers from natural disaster prone areas are trained on disaster education.</p>  | <p>4-1 Record of model schools observation of classes</p> <p>4-2 Records of training, workshops and seminars (Number of participants, content of training, date, level of achievement, etc.)</p>                                 |  |
| <p>&lt;Task force – Flash Flood Risk Management&gt;<br/>5. Knowledge and technical capacity of DDPM on hazard mapping, early warning system and design of structural measures are enhanced.</p>  | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping are developed.</p> <p>5-2 Manuals on early warning system and structural measures for flood mitigation and prevention are developed.</p> <p>5-3 Training targeting on all of 18 DPM regional centers using the above manuals.</p>  | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping</p> <p>5-2 Manuals on early warning system and structural measures.</p> <p>5-3 Record of training (number of regional centers participating in the trainings)</p> |  |
| <p><b>Activities</b><br/>0-0 DDPM, in consultation with the Japanese experts, selects model areas:<br/>➢ Model province A: Lamphun<br/>Model community a1: Ban Chai Chom Phu (Moo 10) and Ban Mae Salaem (Moo 6)<br/>Model community a2: Ban Chawfa (Moo 5: Chowfa and Jokfa)<br/>➢ Model province B: Lamphun<br/>Model community b1: Ban Muong Sam Pee (Moo 8)<br/>Additional model community b2: Ban Koornong (Moo 2)<br/>Additionally, TF-CBDRM selected Ban Tham Talod (Moo 4) as a model community in Nakhon Si Thammarat Province.<br/>&lt;TF Disaster Management Planning&gt;<br/>1-1 TF Disaster Management Planning designs capacity development plan on their activities and monitoring/ evaluation.<br/>1-2 TF conduct training for 300 DDPM staff at central, regional and provincial levels how to formulate disaster prevention and mitigation plans and action plans, focusing on priority items.<br/>1-3 DDPM staff at central and provincial levels review and/or develop provincial disaster prevention and mitigation plans, focusing on priority items, in consideration of vulnerable people for disasters, for the model provinces of Lamphun and Lamphun.<br/>1-4 DDPM staff at central and provincial levels prepares national and provincial disaster prevention and mitigation action plans, and model local authorities in model provinces prepare local disaster prevention and mitigation action plans, focusing on priority items, in which method of up-scaling, staffing and budget are identified and incorporated in the model provinces of Lamphun and Lamphun.</p> | <p><b>Inputs</b><br/>&lt;Thai side&gt;<br/>Counterparts<br/>Project Director<br/>Project Manager<br/>Task force members<br/>Administrative staff<br/><br/>Project office and facilities at DDPM<br/>Working space at MOE<br/><br/>Operational costs<br/>&lt;Japanese Side&gt;<br/>Experts<br/>Disaster Management Plan<br/>Disaster Management Institution<br/>Sediment Disaster Management<br/>Flood Management<br/>Community Based Disaster Risk Management<br/>Disaster Education<br/>Disaster Management Exercise</p> | <p><b>Preconditions</b><br/>Human resources and budget necessary for the implementation of the Project are provided by the Thai side.</p>  |  |



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| <p>Counterpart Training in Japan<br/>Operational costs</p> | <p>1-5 TF conducts table-top exercises to revise disaster prevention and mitigation plans and action plans with concerned organizations.</p> <p>1-6 TF and concerned provincial staff modify disaster prevention and mitigation plans and action plans, based on the experience of table top exercises.</p> <p>1-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF CBRM&gt;<br/>2-1 TF-CBRM designs capacity development plan on TF-CBRM activities and monitoring/evaluation.</p> <p>2-2 TF reviews and revises CBRM manuals and facilitator's guide seeking comments from 76 provinces and tests them at the model communities and finalizes them for publication.</p> <p>2-3 TF conducts training for at least 80 DDPM staff at central, regional and provincial levels to facilitate CBRM. TF conducts training for staff of local authorities in the model provinces to enhance the knowledge of CBRM for at least 220 staffs (300 staffs in total).</p> <p>2-4 Trained DDPM provincial staff in Lamphun Province facilitates CBRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at the model communities of Ban Chat Chom Phu (Moo 10) and Ban Mae Salaem (Moo 6) in collaboration with the local model school.</p> <p>2-5 Trained DDPM provincial staff in Lamphun Province facilitates CBRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at the model community of Ban Muong Sam Pee (Moo 8) in collaboration with the local model school.</p> <p>2-6 Trained DDPM provincial staff in Lamphun Province facilitates CBRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at the model community of Ban Chawfa (Moo 5; Chowfa and Jokfa) in collaboration with the local model school.</p> <p>2-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF Disaster Management Training&gt;<br/>3-1 TF-Disaster Management Training designs a capacity development plan for its activities and monitoring/evaluation.</p> <p>3-2 TF develops guidelines for evaluation and monitoring of training.</p> <p>3-3 TF conducts needs assessment for training in collaboration with other task forces.</p> <p>3-4 TF revises standard disaster management curriculum in DPMA training courses on flood, flash flood and mud flow.</p> <p>3-5 TF, in collaboration with concerned organizations, develops training modules and materials to synchronize training curriculum on disaster management (flood, flash flood and mud flow), CBRM.</p> <p>3-6 TF, in collaboration with concerned organizations, train master trainers for DDPM staff.</p> <p>3-7 Master trainers train 300 DDPM staff of disaster management on flood, flash flood and mud flow.</p> <p>3-8 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> |
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|  | <p><b>&lt;TF Disaster Education&gt;</b><br/> 4-1 DDPM and Ministry of Education discuss and agree on the roles of each agency to implement TF-disaster education activities.<br/> 4-2 TF in collaboration with OBEC develops model curriculum of disaster education in schools on flood, flash flood, mudflow, and Tsunami.<br/> 4-3 TF in collaboration with OBEC modifies textbooks and teachers' guide.<br/> 4-4 TF selects at least four model schools and ESAOs in northern, north-eastern, central, and southern part of Thailand for disaster education planning and implementation.<br/> 4-5 TF in collaboration with MOE trains at least four model schools collaboration with ESAOs.<br/> 4-6 ESAOs that supervise model schools prepare disaster education strategic plan and curriculum design to enhance the outcome to other schools including private schools.<br/> 4-7 Model schools train at least 100 teachers how to teach disaster education at schools in cooperation with local communities, cooperation with local authorities and DPM offices.<br/> 4-8 TF in collaboration with MOE develops at least one master school as information center of disaster education.<br/> 4-9 TF in collaboration with OBEC reviews the process and revises curriculum.<br/> 4-10 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> <p><b>&lt;TF Flood Risk Management&gt;</b><br/> 5-1 TF designs capacity development plan on its activities and monitoring/evaluation.<br/> 5-2 TF selects one sub-basin model site in Lamphun or Lamphun province based on GIS base risk area maps which are being prepared by DDPM..<br/> 5-3 TF prepares manuals for rainfall / flood analysis and hazard mapping through the process of the practical training taking the model site as an example.<br/> 5-4 TF prepares manuals for improvement of early warning system and for evaluation of structural measures, in which the result of 5-3 will be functionally utilized.<br/> 5-5 TF conducts training on hazard mapping, early warning system and structural measures targeting DPM regional centers using the above manuals.</p> |
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## ***Appendix 2***

### ***Record of Joint Coordination Committee (JCC)***



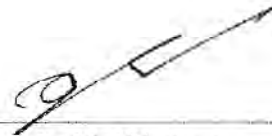
MINUTES OF MEETINGS  
ON  
INCEPTION REPORT  
FOR  
THE PROJECT ON CAPACITY DEVELOPMENT IN DISASTER MANAGEMENT  
IN THAILAND (PHASE-2)

AGREED UPON BETWEEN  
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF  
THE KINGDOM OF THAILAND  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY

Bangkok, 18 June 2010



Mr. Noritoshi Maehara  
Chief Advisor, Expert Team  
Japan International Cooperation Agency (JICA)  
Japan



Mr. Anucha Mokkhavesa  
Director-General  
Department of Disaster  
Prevention and Mitigation,  
Ministry of Interior



Mrs. Sivika Mektavatchaiku  
Deputy Permanent Secretary,  
Ministry of Education

In response to the request of the Government of the Kingdom of Thailand, the Government of Japan has decided to conduct the technical cooperation concerning the "Project on Capacity Development in Disaster Management in Thailand (Phase 2)" (hereinafter referred to as "the Project"). The Japan side and the Thai side came to an agreement on the Record of Discussion (hereinafter referred to as "R/D") which was signed on 9 March 2010 between the Department of Disaster Prevention and Mitigation, Ministry of Interior (hereinafter referred to as "DDPM") and the Ministry of Education (hereinafter referred to as "MOE"), and Japan International Cooperation Agency (hereinafter referred to as "JICA").

Based on the R/D, JICA dispatched the Expert Team (hereinafter referred to as "the Team") headed by Mr. Noritoshi MAEHARA from 7 June 2010 for the commencement of the Project. The Team held a series of meeting with the officials of DDPM, MOE and other authorities concerned on the Project and explained the contents of the Inception Report (hereinafter referred to as "IC/R"). The list of the participants is attached as Annex 1.

The IC/R was accepted by the Thai side in principle. The following are the main points discussed and agreed by the both sides.

1. Implementation of the Project

The Team explained and the Thai side understood that the Project will be implemented by the Thai initiative and supported by the Team.

2. Role of DDPM in the Project

DDPM, the implementing agency of the Project, takes the leadership of the Project implementation in collaboration with other authorities concerned and assumes overall responsibility for spreading and developing the Project outputs to other areas in Thailand after completion of the Project.

3. Role of MOE in the Project

MOE, the co-implementing agency of the Project, shall be responsible for spreading and developing school disaster education and supporting related activities with DDPM in creating synergistic effects of community based disaster risk management (CBDRM) and disaster education in Thailand.

4. Involvement of other related organizations

DDPM shall collaborate with concerned agencies, and utilize the knowledge and information accumulated in such agencies for enhancement of disaster management capacity of DDPM.

5. The Project will partially support achievement for the National Disaster Prevention and Mitigation Plan (2010 - 2014) by preparation of the road map with quantitative targets in preparation of disaster prevention and mitigation action plans, promotion of CBDRM, disaster management training, and disaster education.

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Handwritten signature and date. The date "2010" is written vertically on the left, and the signature "Noritoshi Maehara" is written on the right.

6. The first Joint Coordination Committee (hereinafter referred to as "JCC") meeting was held on 18 June 2010 at DDPM and was chaired by Mr. Prateep Keeratirekha, Deputy Director-General of DDPM. The list of participants (hereinafter referred to as the "Thai side") is attached as Annex 2.

7. Nomination of Counterpart Personnel for Each Output/ (Activity) of the Project  
The Team requested the Thai side to assign enough number of counterparts for respective outputs/ (activities). The Thai side agreed to assign the counterparts as shown in Annex 3.

8. Acceptance of the Inception Report (IC/R)  
The Team, headed by Mr. Noritoshi MAEHARA, explained the contents of IC/R and outlined outputs of the Project. The Thai side agreed upon the contents of IC/R and the outlined outputs.

9. Proposal from the Team  
The Team proposed the following matters to DDPM and MOE for implementation of the Project. The Thai side agreed upon the proposal.

9.1 Formation of Task Force  
The following Task Forces (hereinafter referred to as "TF") will be established to facilitate implementation of the activities in the Project.

TF-1: Disaster Management Planning

TF-2: Community Based Disaster Risk Management (hereinafter referred to as "CBDRM")

TF-3: Disaster Management Training

TF-4: Disaster Education

9.2 Formation of Inter-Task Force Meeting  
Inter-Task Force Meeting will be organized from representatives of the Task Force (hereinafter referred to as "Inter-TF") members from DDPM, DPMA and MOE having the following functions;

- a) To share information on activities of Four (4) Task Forces;
- b) To discuss on effective implementation in collaboration among Task Forces; and
- c) To serve as representative of Task Forces for communications and discussions in case of corporation and collaboration with other organizations.

The meeting will be held once every two weeks to perform the functions mentioned above. The Team will attend the meeting as supporting member(s) during the Project period.

9.3 Sub-Task Forces  
In order to carry out the activities for preparation of Disaster Prevention and Mitigation Action Plans, CBDRM and School Disaster Education effectively, the Team proposes to form sub-task forces consisting of staffs of Provincial DDPM, Educational Service Area Office (ESAO), local administrative organizations and concerned agencies/organizations.



#### 9.4 Review of Phase-1 Project Results

To begin with the Project, outputs of the Phase-1 Project should be reviewed together with TF members. Reviewing the successful and unsuccessful cases, tasks for future activities will be found out and their improvement measures will be discussed in collaboration with TF. Based on the review results, activities for the Project shall be adjusted.

#### 9.5 Proper Selection of Model Areas

DDPM proposed eight communities in the four candidate model provinces based on the criteria stated in ANNEX 4 of the minutes of meeting dated October 8, 2009 between JICA and the authorities concerned as shown in Annex 4. Both DDPM and JICA Experts will confirm the appropriateness of the candidate provinces based on the past flood records.

Criteria for selection of the model sites from candidate provinces will be decided by the end of June 2010 considering 1) flood types and 2) convenience of spreading and developing the Project outputs. Model provinces, model communities and model schools will be decided based on the criteria and information obtained through site visit by the end of July 2010.

#### 9.6 Counterpart Training in Japan

Activities of the TFs are closely related each other and it is important to solidify cooperative tie among them. It is essential to acquire the basic knowledge of other TFs' activities and to establish personal networks. For that purpose, the training in Japan shall be implemented for the participants under the consideration and the mutual agreement between DDPM and MOE.

##### (1) Objectives:

- a) To acquire extensive knowledge and skills for disaster management through watching, hearing and experiencing the efforts of central and local governments, communities and schools in Japan.
- b) To exchange knowledge with the people in charge of disaster management in the central and local governments, communities, and schools in Japan
- c) To exchange views and strengthen coordination among participants from different TFs and Japanese experts
- d) To prepare action plans to improve TF activities by feeding back the knowledge and skills acquired through the training

##### (2) Time and Duration:

For about two (2) weeks in November 2010, 2011, and in June and November 2012 (4 times in total)

##### (3) Participants:

Four (4) to five (5) people from each TF (16 to 20 people in total)

A handwritten signature in black ink, appearing to read 'K. Inoue', is written over a circular official stamp. The stamp contains some illegible text and a central emblem.



## 9.7 Public Relations of the Project Activities

Public relations of the project activities is important to raise public awareness on the necessity of the disaster management activities. Press release, newsletters, web-sites, and pamphlets on the project activities shall be effectively utilized for public relations.

It is one of the good measures to exchange newsletters and/or email on activities of CBDRM and school disaster education with the communities and schools that work on disaster management in Japan, Indonesia, Sri Lanka, Pakistan, etc. It shall help understanding the variation of the activities by country each other. It shall also be a good opportunity to share good practices of Thailand with the other countries. Such international exchange may attract attention of the public.

## 9.8 Trainings/Workshops in Thailand

Outline of trainings/workshops is presented as shown in Table 1. Training place, method, and number of participants of the trainings/workshops are tentative one and their details shall be decided at the commencement of the Project.

## 10. Discussion with Representatives of Task Forces

### 10.1 TF-1: Disaster Management Planning

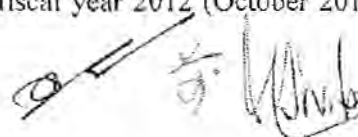
- (1) Disaster Prevention and Mitigation Policy Bureau of DDPM will be in charge of TF-1: Disaster Management Planning.
- (2) Disaster prevention and mitigation action plan will be formulated for the model area as a role model. Then, the model will be utilized for the trainings of DDPM staff for preparation of the action plans for other areas. This approach will make it easy to spread and develop the activities to other areas.

### 10.2 TF-2: CBDRM

- (1) Disaster Prevention and Promotion Bureau of DDPM will be in charge of TF-2: CBDRM.
- (2) Due to the limitation of the budget allocation, 100 DDPM staff will be trained as facilitators for promotion of CBDRM in the 1st year and 200 DDPM and local administration staff in the 2nd to 4th years.
- (3) The training will be held at the DPMA center in the 1st year since the facilities are sufficient. It will be continued at local levels from the 2nd year.

### 10.3 TF-3: Disaster Management Training

- (1) DPMA will be in charge of TF-3: Disaster Management Training.
- (2) Although the training of DDPM staff as master trainers is planned to start from the second year (from April 2011), its budget for the fiscal year 2011 (October 2010 - September 2011) has not been prepared. Based on the cost estimate of the training, DPMA will search for ways to realize the training with JICA Expert.
- (3) The Thai side agrees to secure the budget for the fiscal year 2012 (October 2011 - September

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2012) and afterward so that the training can be conducted on schedule.

- (4) The curriculum for the training will be prepared by DPMA with assistance of JICA expert for budgetary request for the fiscal year 2011 by November 2010.

#### 10.4 TF-4: Disaster Education

- (1) MOE will be in charge of TF-4: Disaster Education.
- (2) Teachers will also participate in the seminars on management of earthquake and other natural disasters to acquire basic knowledge about it.
- (3) The training of master teachers for disaster education will be implemented at the Phase-2 model schools inviting teachers from the Phase-1 model schools as trainers for efficient implementation of the training.
- (4) Establishment and functions of the information center on education (including disaster education) will be discussed between MOE and JICA expert.

#### 10.5 Supporting Agencies

##### 10.5.1 Disaster Mitigation Directing Center, DDPM

- (1) Disaster Mitigation Directing Center of DDPM will be a supporting agency of the Phase-2 Project.
- (2) The Center will support the trainings for emergency response by the central, regional, provincial, and community levels including the table-top exercises to be held in the Phase-2 Project.
- (3) JICA Experts will observe the large-scale exercise for flash flood to be held in Trat Province in August 2010.

##### 10.5.2 Disaster Prevention Criteria Bureau, DDPM

- (1) Disaster Prevention Criteria Bureau of DDPM will be a supporting agency of the Phase-2 Project.
- (2) The Bureau will support the Phase-2 Project in preparation of the flood hazard maps for the model communities (Scale 1:4,000).
- (3) The Bureau will support the training of DDPM staff for disaster prevention planning with regard to hazard mapping.

##### 10.5.3 Research and Development Sub-Bureau, Research and International Cooperation Bureau, DDPM

- (1) Research and Development Sub-Bureau will be a supporting agency of the Phase-2 Project.
- (2) The Sub-Bureau will be responsible for hazard information and also evaluation of the process of activities of the Project such as Disaster Prevention and Mitigation Planning, CBDRM, etc.

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**Table 1 Outline of Trainings/Workshops in Thailand (Tentative)**

| Outline of Training                   |   | 1st yr. | 2nd yr. | 3rd yr.                | 4th yr. | Forward                |
|---------------------------------------|---|---------|---------|------------------------|---------|------------------------|
| TF-Disaster Management Planning (DMP) | <b>1. Training of DDPM Staff for Disaster Prevention Planning:</b><br>1) TF-DMP and DPMA<br>2) Preparation/revision of Disaster Prevention and Action Plans<br>3) DDPM staff at central/regional/provincial levels<br>4) DPMA regional campus (6 places)<br>5) Workshop<br>6) 50 persons x 3 places x 2 years = 300 persons   |         |         | To be continued by GOT |         |                        |
|                                       | <b>2. Table-top Exercise for Verification of Disaster Prevention Plans:</b><br>1) TF-DMP and DPMA<br>2) Verification of Disaster Prevention and Action Plans<br>3) DDPM staff at central/regional/provincial levels<br>4) Central office of DPMA<br>5) Workshop, role playing, and table-top exercise<br>6) About 50 persons per year                               |         |         |                        |         | To be continued by GOT |
| TF-CBDRM                              | <b>3. Training of DDPM Staff as Facilitators for Promotion of CBDRM:</b><br>1) TF-CBDRM<br>2) Training of facilitators for promotion of CBDRM<br>3) DDPM and local administration staff<br>4) 1st year in the central campus, 2-4 years in local levels<br>5) Workshop, DIG and evacuation drill<br>6) 50 persons x 2 batches x 3-4 years = more than 300 persons   |         |         | To be continued by GOT |         |                        |
| TF-Disaster Management Training (DMT) | <b>4. Training of DDPM Staff as Master Trainers:</b><br>1) TF-DMT and DPMA<br>2) Training of master trainers for natural disaster management<br>3) DDPM staff at central/regional/provincial levels<br>4) Central office of DPMA<br>5) Workshop and DIG<br>6) 30 persons x 3 years = 90 persons   |         |         |                        |         | To be continued by GOT |
|                                       | <b>5. Training of DDPM Staff for Natural Disaster Management:</b><br>1) TF-DMT and DPMA<br>2) Training of DDPM staff for natural disaster management<br>3) DDPM staff at central/regional/provincial levels<br>4) DPMA regional campus (6 places)<br>5) Workshop and DIG<br>6) 50 persons x 2 places x 3 years = 300 persons  |         |         |                        |         | To be continued by GOT |
| TF-Disaster Education (DE)            | <b>6. Training of Master Teachers for Disaster Education:</b><br>1) TF-DE and MOE<br>2) Training of master teachers for disaster education<br>3) Teachers in model provinces<br>4) At Phase-2 model schools inviting the teachers in Phase-1 model schools<br>5) Lecture, model lesson, DIG, evacuation drill, etc.<br>6) More than 40 teachers in 1st year         |         |         | To be continued by GOT |         |                        |
|                                       | <b>7. Training of Teachers in Model Schools:</b><br>1) TF-DE and MOE<br>2) Training of teachers for school disaster education<br>3) Teachers in model provinces and others<br>4) Phase-2 model schools and others<br>5) Lecture, model lesson, DIG, evacuation drill, etc.<br>6) 35 teachers x 3 years = 105 teachers   |         |         |                        |         | To be continued by GOT |
| Common                                | <b>8. Seminars for Management of Earthquake and Other Natural Disasters:</b><br>1) All TF and JICA Experts<br>2) Management of earthquake and other natural disasters:<br>3) Staff of DDPM, MOE, and other organizations concerned<br>4) Meeting hall in Bangkok<br>5) Lectures by experts including Phase-1 JICA Experts<br>6) 100 persons x 2 years = 200 persons |         |         |                        |         |                        |

Note:

1) Held by (executing agency), 2) Theme of training, 3) Participants/trainee, 4) Training place, 5) Type of training, 6) Remarks



: Assistance by JICA Experts which will decrease gradually and finally conducted fully by GOT.

List of the Participants of IC/R Meetings

**Thai Side:**

|                               |  |
|-------------------------------|--|
| Mr. Adthaporn Singhawichai    | Director, Research and International Cooperation Bureau (RICB), DDPM   |
| Ms. Chatchadaporn Boonyavaha  | Chief of Foreign Relations Sub-Bureau, RICB, DDPM  |
| Mr. Chainarong Vasanasomsithi | Director, Natural Disaster Policy Division, Disaster Prevention and Mitigation Policy Bureau, DDPM                   |
| Mr. Sitthigon Kwandee         | Natural Disaster Policy Division, Disaster Prevention and Mitigation Policy Bureau, DDPM                             |
| Ms. Kamonwan Jitpakdi         | Disaster Prevention and Promotion Bureau, DDPM   |
| Ms. Amornthip Paksuchon       | Disaster Prevention and Promotion Bureau, DDPM   |
| Ms. Chakreeya Setthaseree     | Disaster Prevention and Mitigation Academy (DPMA), DDPM  |
| Mr. Somsong Ngamwong          | Chief of International Cooperation Unit, Bureau of International Cooperation, Office of the Permanent Secretary, MOE |
| Ms. Sararat Leepaiboon        | Bureau of Academic Affairs and Educational Standards, OBEC, MOE  |
| Ms. Rungkan Pimpukdee         | Bureau of International Cooperation, MOE   |
| Ms. Angsumalin Angsusingma    | Disaster Mitigation Directing Center, DDPM   |
| Mr. Dusit Pongsapipat         | Disaster Mitigation Directing Center, DDPM   |
| Mr. Paitoon Naktakae          | Director, Safety Standard Section, Disaster Prevention Criteria Bureau, DDPM   |
| Mr. Amnat Phonmart            | Civil Engineer, Safety Standard Section, Disaster Prevention Criteria Bureau, DDPM                                   |
| Ms. Duangnapa Uttamangkpong   | RICB, DDPM   |
| Ms. Kornisnan Wilawan         | RICB, DDPM   |
| Mr. Thaweep Limpakornwanich   | RICB, DDPM   |

**Japanese Side:**

|                           |  |
|---------------------------|--|
| Ms. Mamiko Tanaka         | Program Officer, Disaster Management Division 1, Water Resources and Disaster Management Group, Global Environment Department, JICA HQ |
| Ms. Kiyoka Takeuchi       | Representative, JICA Thailand Office   |
| Ms. Nutthakan Thasnanipan | Program Officer, JICA Thailand Office  |
| Mr. Noritoshi Maehara     | Chief Advisor/Disaster Management Institution Expert   |
| Mr. Noboru Jitsuhiro      | Co-Chief Advisor/Disaster Management Plan Expert   |
| Mr. Makoto Kodama         | Flood Management Expert/Project Coordinator  |



List of the Participants of JCC

Thai Side:

Deputy Permanent Secretary of MOE (Advisor of Committee)  
Director-General of Department of Disaster Prevention and Mitigation (Chairman)  
Deputy Director-General of DDPM (Vice Chairman)  
Director of International Relation Bureau, MOE (Vice Chairman)  
Director of Research and International Cooperation Bureau, DDPM (Secretariat)  
Director of Disaster Prevention and Mitigation Policy Bureau, DDPM  
Director of Disaster Prevention and Promotion Bureau, DDPM  
Director of Disaster Prevention and Mitigation Academy: DPMA  
Director, Bureau of International Cooperation, Office of Permanent Secretary for Education, MOE  
Director of Bureau of Academic Affairs and Educational Standards, Office of Basic Education Commission, MOE  
Representative(s) of Department of Mineral Resources: DMR  
Representative(s) of Department of Local Administration: DOLA  
Representative(s) of National Disaster Warning Center: NDWC  
Representative(s) of Royal Irrigation Department: RID  
Representative(s) of Thai Meteorological Department: TMD  
Representative(s) of Water Resource Department: WRD  
Representative(s) of Office of Women's Affairs and Family Development, Ministry of Social Development and Human Security  
Representative of Thailand International Development Cooperation Agency: TICA  
Personnel assigned by the Chairperson, if necessary

Japanese Side:

|                           |  |
|---------------------------|--|
| Ms. Mamiko Tanaka         | Program Officer, Disaster Management Division 1, Water Resources and Disaster Management Group, Global Environment Department, JICA HQ |
| Mr. Akihisa Tanaka        | Senior Representative, JICA Thailand Office  |
| Ms. Kiyoka Takeuchi       | Representative, JICA Thailand Office   |
| Ms. Nutthakan Thasnanipan | Program Officer, JICA Thailand Office  |
| Mr. Noritoshi Maehara     | Chief Advisor/Disaster Management Institution Expert   |
| Mr. Noboru Jitsuhiro      | Co-Chief Advisor/Disaster Management Plan Expert   |
| Mr. Makoto Kodama         | Flood Management Expert/Project Coordinator  |



List of C/P Personnel

| Name   | Position   | Remarks                 |
|--|--|-------------------------|
| <b>Inter-Task Force Meeting</b>  |  |                         |
| 1 Mr. Adlhaporn Singhawichai   | Director of Research and International Cooperation Bureau                                      | Head                    |
| 2 Ms. Luckkana Manimmanakorn   | Deputy Director of Technical Sub-Bureau, DPMA  | Representative of TF 3  |
| 3 Mr. Chainarong Vasanasomsilhi  | Director of Natural Disaster Policy Division, Disaster Prevention and Mitigation Policy Bureau | Representative of TF 1  |
| 4 Mr. Natchanon Sorprasert   | Director of Participation Promotion Division, Disaster Prevention and Promotion Bureau         | Representative of TF 2  |
| 5 Ms. Sararat Leparboon  | MOE  | Representative of TF 4  |
| 6 Mr. Arun Pinta   | Acting Chief of Foreign Relations Sub-Bureau, RICB   | Member and Secretary    |
| 7 Ms. Duangnapa Uitamangkapong   | Plan and Policy Analyst  | Coordinator, RICB, DDPM |
| 8 Ms. Kornisan Wilawan   | Plan and Policy Analyst  | Coordinator, RICB, DDPM |
| <b>TF1: Disaster Management Planning</b>   |  |                         |
| 1 Director of Disaster Prevention and Mitigation Policy Bureau, DDPM   | Head   |                         |
| 2 Representative of MOE  | Member   |                         |
| 3 Representative of DMR  | Member   |                         |
| 4 Representative of DOLA   | Member   |                         |
| 5 Representative of NDWC   | Member   |                         |
| 6 Representative of RID  | Member   |                         |
| 7 Representative of TMD  | Member   |                         |
| 8 Representative of WRD  | Member   |                         |
| 9 Representative of Disaster Prevention and Promotion Bureau, DDPM   | Member   |                         |
| 10 Representative of DPMA  | Member   |                         |
| 11 Representative of Disaster Prevention Criteria Bureau, DDPM   | Member   |                         |
| 12 Director of Planning and Budget Division, Disaster Prevention and Mitigation Policy Bureau, DDPM                                | Member   |                         |
| 13 Japanese Experts  | Member   |                         |
| 14 Mr. Chainarong Vasanasomsilhi<br>Director of Natural Disaster Policy Division, Disaster Prevention and Mitigation Policy Bureau | Member and Secretary   |                         |
| 15 Ms. Siriporn Wachirasuriya<br>Plan and Policy Analyst   | Member and Assistant Secretary   |                         |
| 16 Mr. Sithigon Kwandee<br>Plan and Policy Analyst   | Member and Assistant Secretary   |                         |
|  |  |                         |
|  |  |                         |
|  |  |                         |





| Name   | Position                       | Remarks |
|--|--------------------------------|---------|
| <b>TF2: CBDRM</b>  |                                |         |
| 1 Director of Disaster Prevention and Promotion Bureau, DDPM   | Head                           |         |
| 2 Representative of MOE  | Member                         |         |
| 3 Representative of DMR  | Member                         |         |
| 4 Representative of DOLA   | Member                         |         |
| 5 Representative of Disaster Prevention and Mitigation Policy Bureau, DDPM   | Member                         |         |
| 6 Representative of DPMA   | Member                         |         |
| 7 Representative of Research and Development Sub-Bureau, Research and International Cooperation Bureau, DDPM             | Member                         |         |
| 8 Representative from the target province (Demonstration and Replication)  | Member                         |         |
| 9 Japanese Experts   | Member                         |         |
| 10 Mr. Natchanon Sorprasert<br>Director of Participation Promotion Division,<br>Disaster Prevention and Promotion Bureau | Member and Secretary           |         |
| 11 Ms. Oranuth Lo-Ounlum<br>Plan and Policy Analyst<br>Disaster Prevention and Promotion Bureau                          | Member and Assistant Secretary |         |
| 12 Mr. Dusit Pong Sapipat<br>Plan and Policy Analyst<br>Disaster Mitigation Directing Center                             | Member and Assistant Secretary |         |
| <b>TF3: Disaster Management Training</b>   |                                |         |
| 1 Director of Disaster Prevention and Mitigation Academy, DPMA, DDPM   | Head                           |         |
| 2 Representative of MOE  | Member                         |         |
| 3 Representative of DMR  | Member                         |         |
| 4 Representative of RID  | Member                         |         |
| 5 Representative of TMD  | Member                         |         |
| 6 Representative of Disaster Prevention and Promotion Bureau, DDPM   | Member                         |         |
| 7 Japanese Experts   | Member                         |         |
| 8 Ms. Luckkana Manimmanakorn<br>Deputy Director of Technical Sub-Bureau, DPMA  | Member and Secretary           |         |
| 9 Ms. Paorumpai Janya<br>Human Resources Development Official, DPMA  | Member and Assistant Secretary |         |
| 10 Ms. Chakreeya Seithaseree<br>Plan and Policy Analyst, DPMA  | Member and Assistant Secretary |         |
|  |                                |         |
|  |                                |         |



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| Name   | Position                       | Remarks |
|--|--------------------------------|---------|
| TF: 4 Disaster Education   |                                |         |
| 1 Deputy Permanent Secretaries   | Head                           |         |
| 2 Representative of Office of the Vocational Education Commission  | Member                         |         |
| 3 Director of Bureau of Academic Affairs and Educational Standards, Office of the Basic Education Commission       | Member                         |         |
| 4 Director of Bureau of International Cooperation or Representative, Office of the Permanent Secretary             | Member                         |         |
| 5 Director of Bureau of Policy and Strategy or Representative, Office of the Permanent Secretary                   | Member                         |         |
| 6 Director of Bureau of the Private Education Commission or Representative, Office of the Permanent Secretary      | Member                         |         |
| 7 Director of Bureau of Inspection and Evaluation or Representative, Office of the Permanent Secretary             | Member                         |         |
| 8 Director of Office of the Non-Formal and Informal Education or Representative, Office of the Permanent Secretary | Member                         |         |
| 9 JICA Experts   | Member                         |         |
| 10 Representative of Department of Disaster Prevention and Mitigation (DDPM)                                       | Member                         |         |
| 11 Chief of International Cooperation Unit Bureau of International Cooperation                                     | Member and Secretary           |         |
| 12 Foreign Relations Officer, Professional Bureau of International Cooperation                                     | Member and Assistant Secretary |         |
|  |                                |         |

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Annex-4 ANNEX 4 of the Minutes of Meeting dated October 8, 2009 between JICA and the Authorities Concerned

ANNEX 4: CRITERIA OF SELECTING TARGET AREAS

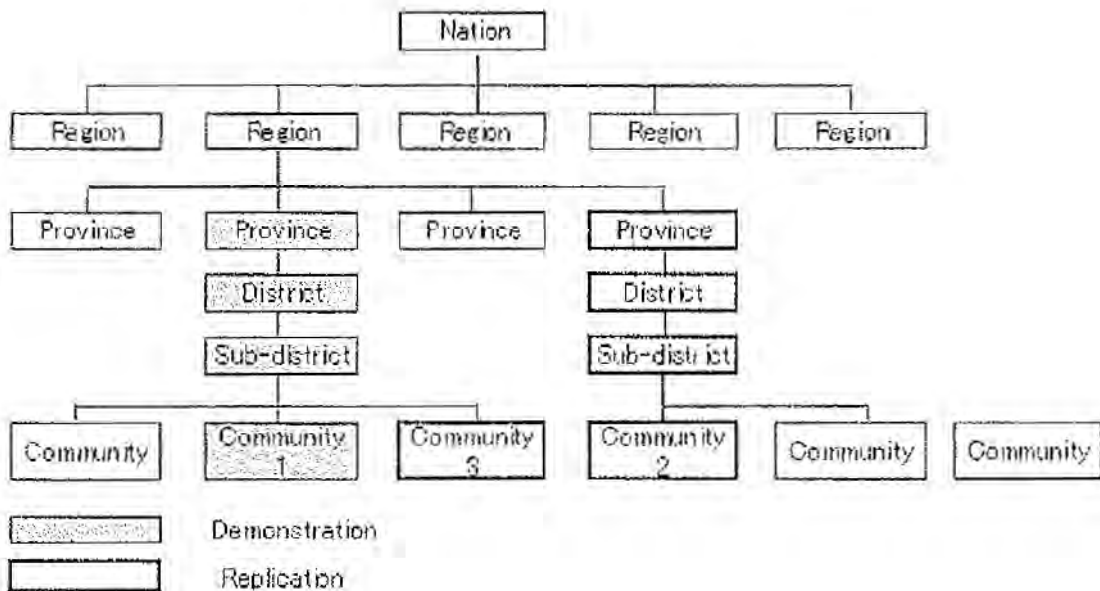
Both sides agreed to select two target provinces (Demonstration province and Replication Province) according to the criteria as follows,

(Controlling Factors)

1. Vulnerabilities of flood, flash flood and mudflow (Past disasters)
2. Accessibility from Bangkok and other provinces
3. Other factors aggravate disaster situations, such as deforestation, urbanization etc.

(Second Priority Social Factors)

1. Leadership, willingness, understanding and cooperation of leaders of province, district, and local administrations toward the Project
2. Good collaboration network among province, district, and local administrations
3. Human resources and budget allocation to implement the Project activities at province, district, and local administrations
4. Existing CBOs (Community Based Organizations)



notes

| <English>    | <Thai>   |
|--------------|--|
| Region       | : DDPM Regional Centers and MOE Regional Offices |
| Province     | : Province                                       |
| District     | : AMPUR  |
| Sub-district | : TAMBON   |
| Community    | : MOOBAN   |

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**MINUTES OF MEETINGS  
ON  
JOINT COORDINATING COMMITTEE  
FOR  
THE PROJECT  
ON  
CAPACITY DEVELOPMENT IN DISASTER MANAGEMENT  
IN THAILAND (PHASE-2)**

**AGREED UPON BETWEEN  
THE AUTHORITIES CONCERNED OF THE GOVERNMENT  
OF THE KINGDOM OF THAILAND  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY**

Bangkok, September 5, 2011

前原 規利

Mr. Noritoshi MAEHARA  
JICA Expert  
Japan International Cooperation Agency  
Japan

W. Sanguanpong

Mr. Wiboon Sanguanpong  
Director -General  
Department of Disaster Prevention and  
Mitigation,  
Ministry of Interior

Churairat Sangboonnum

Ms. Churairat Sangboonnum  
Deputy Permanent Secretary of Education  
Ministry of Education

In response to the request of the Government of the Kingdom of Thailand, the Government of Japan has decided to conduct the technical cooperation concerning the "Project on Capacity Development in Disaster Management in Thailand (Phase 2)"(hereinafter referred to as "the Project"). The Japan side and the Thai side came to an agreement on the Record of Discussion (hereinafter referred to as "R/D") which was signed on March 9, 2010 between the Department of Disaster Prevention and Mitigation, Ministry of Interior (hereinafter referred to as "DDPM") and the Ministry of Education (hereinafter referred to as "MOE"), and Japan International Cooperation Agency (hereinafter referred to as "JICA").

Based on the R/D, JICA dispatched the Expert Team (hereinafter referred to as "the Team") headed by Mr. Noritoshi MAEHARA from June 7, 2010 as the first batch. The Team and Thai side (DDPM, MOE and other authorities concerned of the Project) had a series of discussion on the revision of the Project Design Matrix (hereinafter referred to as "PDM"), establishment of the New Task Forces for Flood Risk Management and Baseline Survey and Monitoring of CBDRM in Joint Coordinating Committee (hereinafter referred to as "JCC").

The list of the participants of JCC is attached as Annex 1.

Both sides come to agreement as follows;

1. Revision of the PDM

Both sides agreed upon the PDM Version 2.

The target groups, the target provinces and indicators of PDM have been revised as attached Annex 3.

The PDM Version 1 is also attached as Annex 2.

2. Establishment of New Task Forces

The following new Task Forces (hereinafter referred to as "TF") have been additionally proposed by Thai side to facilitate implementation of the Project.

2-1. TF-5: Flood Risk Management

The objectives and activities were explained by DDPM and JICA Experts as attached Annex 4. It was suggested from the representatives from several agencies that the scope of work and output should be clarified so that the output will have been attained in the project period.

The detail activity and output of the TF will be discussed among the related agencies and agreed upon in the next JCC.

The Proposed Activities and Output of TF-5 are as attached Annex 4 (the activities and output of TF-5 will be integrated into PDM after approval by the JCC).

The Proposed Plan of Operation of TF-5 is as attached Annex 5.

The Proposed members of the TF-5 are listed as Annex 6.

## 2-2. TF-6: Baseline Survey and Monitoring of CBDRM

In order to assess the present condition of the community and the progress of disaster management capacity by application of CBDRM, the baseline survey and monitoring survey will be conducted by Research and Development Sub-bureau of DDPM in collaboration with other bureau (if necessary). The representative of JICA Headquarters and JICA Expert proposed that the TF to be included in TF-CBDRM (TF-2). The status of the TF will be agreed upon in the next JCC.

Annex 1 The list of the participants for JCC

Annex 2 Project Design Matrix (Version 1)

Annex 3 Revised Project Design Matrix (Version 2)

Annex 4 Proposed Activity and Output of TF-5

Annex 5 Proposed Plan of Operation of TF-5

Annex 6 The members of the TF-5

**The Second Joint Coordinating Committee Meeting (JCC)  
on September 5, 2011 at Room 352, DDPM  
LIST OF ATTENDANTS**

| No. | Name                           | Position   | Organization         |
|-----|--------------------------------|--|----------------------|
| 1   | Mr. Srisombat Phornprasidhi    | Deputy Director General                                    | DDPM                 |
| 2   | Mr. Adthaporn Singhawichai     | Director, Research and International Cooperation Bureau    | DDPM                 |
| 3   | Mr. Paisal Wisaraporn          | Director, Bureau of International Cooperation              | MOE                  |
| 4   | Mr. Songchai Rohitachart       | Director, Disaster Prevention and Promotion Bureau         | DDPM                 |
| 5   | Mr. Montree Chanachaiwiboonwat | Director, Disaster Prevention and Mitigation Policy Bureau | DDPM                 |
| 6   | Mr. Suwith Kosuwan             | Director, Active Fault Research Division                   | DMR                  |
| 7   | Mr. Sompop Sucharit            | Senior Expert/ General Inspector                           | RID                  |
| 8   | Ms. Sararat Leepaiboon         | Office of Basic Education Commission                       | MOE                  |
| 9   | Ms. Rungarn Punpukdee          | Foreign Relation Official                                  | MOE                  |
| 10  | Ms. Watcharee Virapun          | Director of Weather Forecast Bureau                        | TMD                  |
| 11  | Mr. Supon Sodsoon              | Chief of MEKHALA Center                                    | DWR                  |
| 12  | Ms. Somorn Srisiri             | Social Officer   | OWAF                 |
| 13  | Mr. Sirichai Manachai          | Director, Monitoring and Evaluation Section                | DOLA                 |
| 14  | Mr. Nathapong Wongwaen         | General Administrative Officer                             | DOLA                 |
| 15  | Mr. Wattanawit Gajaseni        | Director, Countries Partnership Branch                     | TICA                 |
| 16  | Ms. Pantila Saengchan          | Foreign Relation Official                                  | TICA                 |
| 17  | Mr. Yoichi ONO                 | Section Chief  | ESCAP                |
| 18  | Mr. Tetsuo HASEGAWA            | First Secretary  | Embassy of Japan     |
| 19  | Mr. Ryotaro HAYASHI            | Secondary Secretary  | Embassy of Japan     |
| 20  | Ms. Chatchadaporn Boonpeeranat | Director Section of Natural Disaster                       | DDPM                 |
| 21  | Mr. Sittigorn Kwandee          | Plan and Policy Analyst                                    | DDPM                 |
| 22  | Mr. Natchanon Sonprasert       | Director Section of Participation Promotion                | DDPM                 |
| 23  | Ms. Wilairat Kahasatien        | Human Resources Development Officer                        | DDPM                 |
| 24  | Ms. Kamonwan Chidpakdee        | Plan and Policy Analyst                                    | DDPM                 |
| 25  | Ms. Oranuth Lo-unlum           | Plan and Policy Analyst                                    | DDPM                 |
| 26  | Ms. Pallarin Phukit            | Plan and Policy Analyst                                    | DDPM                 |
| 27  | Mrs. Krongphan Sudsai          | Scientist  | DDPM                 |
| 28  | Mr. Paitoon Naktae             | Chief of Standard Safety Division                          | DDPM                 |
| 29  | Ms. Luckana Manimmanakorn      | Deputy Director of DPMA                                    | DDPM                 |
| 30  | Mr. Raywat Pongsuwan           | Deputy Director of DPMA                                    | DDPM                 |
| 31  | Mr. Chaitawat Siwabowon        | Deputy Director of DPMA                                    | DDPM                 |
| 32  | Mr. Kittikorn Thepyooamnuay    | Chief of Technical Support Side                            | DDPM                 |
| 33  | Ms. Paorumpai Janya            | Chief of Technical Side                                    | DDPM                 |
| 34  | Ms. Chakreeya Setthaseree      | Plan and Policy Analyst                                    | DDPM                 |
| 35  | Ms. Saisanom Lugtong           | Chief of Research and Development                          | DDPM                 |
| 36  | Ms. Woraphak Krearjaiwang      | Plan and Policy Analyst                                    | DDPM                 |
| 37  | Ms. Chanida Timjarath          | Plan and Policy Analyst                                    | DDPM                 |
| 38  | Mr. Anusorn Keawkangwan        | Director of Regional Center 10 Lampang                     | DDPM                 |
| 39  | Mr. Chumporn Intathep          | Chief of DDPM Provincial Office, Lamphun                   | DDPM                 |
| 40  | Ms. Kamolwan Klubsri           | Human Resources Development Officer                        | DDPM                 |
| 41  | Mr. Nattawut Singkaew          | DPM Provincial Office Lampang                              | DDPM                 |
| 42  | Mrs. Panadda Puchareonsilp     | Chief of Foreign Relations Sub-Bureau                      | DDPM                 |
| 43  | Ms. Duangnapa Uttamangkpong    | Plan and Policy Analyst                                    | DDPM                 |
| 44  | Ms. Kornisnan Wilanwan         | Plan and Policy Analyst                                    | DDPM                 |
| 45  | Ms. Yaowapapan Khongkhasri     | Plan and Policy Officer                                    | DDPM                 |
| 46  | Ms. Sippaka Bimol              | Plan and Policy Officer                                    | DDPM                 |
| 47  | Ms. Yuki TANAKA                | Program Officer  | JICA HQ              |
| 48  | Mr. Hajime TANIGUCHI           | Representative   | JICA Thailand Office |
| 49  | Mr. Kobchai Songsrisanga       | Program Officer  | JICA Thailand Office |
| 50  | Mr. Noritoshi MAEHARA          | Leader of JICA Expert Team                                 | JICA                 |
| 51  | Ms. Hiroko KONDO               | Disaster Education Advisor                                 | Nagoya University    |
| 52  | Mr. Toru KOIKE                 | JICA Expert  | JICA                 |
| 53  | Mr. Jun ONODERA                | JICA Expert  | JICA                 |
| 54  | Mr. Arata SASAKI               | JICA Expert  | JICA                 |



## ANNEX 7: Project Design Matrix (PDM)

**Project Title:** The Project on Capacity Development in Disaster<sup>1</sup> Management (Phase-2) Period: 2010 - 2014 (4 years)  
**Implementing Agency:** Department of Disaster Prevention and Mitigation: DDPM, Co-Implementing Agency: Ministry of Education: MOE  
**Target Groups:** (direct) DDPM staff at central and provincial levels. (indirect) community people in the target areas.  
**Target Provinces:** (to be selected). Two provinces as “model province A” and “model province B”)

# Version 1

(Version 1)

| Narrative Summary   | Objectively Verifiable Indicators   | Means of Verification  | Important Assumptions  |
|---|---|--|--|
| <p><b>Overall Goal (in 3-5 years after the Project ends):</b><br/>                     Implementation of disaster risk management activities is improved and scaled up.</p>   | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in at least Y provinces other than the target provinces.</li> <li>2. Evacuation plans are prepared by Y communities (other than the Project target communities) with support of DDPM Regional Centers and Provincial offices.</li> <li>3. Disaster education is implemented by at least Y schools.</li> </ol> | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans</li> <li>2. Evacuation plans</li> <li>3. Record of schools</li> </ol> |  |
| <p><b>Project Purpose (by the end of the Project)</b><br/>                     Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, Community Based Disaster Risk Management: CBDRM and disaster education, collaborating with concerned agencies, provincial and local levels.</p>    | <ol style="list-style-type: none"> <li>1. Plans for up-scaling are included in the National Disaster Prevention and Mitigation Action Plan.</li> <li>2. Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the target provinces.</li> </ol>  | Disaster Prevention and Mitigation Action Plans  | Mission and responsibility of DDPM regarding disaster management is maintained by law. |
| <p><b>Outputs</b><br/>                     &lt;Task force – Disaster Management Planning&gt;<br/>                     1. Disaster Prevention and Mitigation Action Plans with considerations for vulnerable people are formulated for national, provincial and local authorities<sup>2</sup> (in the target provinces).</p> | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (target provinces) and local levels (X local authorities).</li> </ol>  | <ol style="list-style-type: none"> <li>1 Disaster Prevention and Mitigation Action Plans at national, provincial and local levels</li> </ol>   |  |

**No revision is necessary for below:**

Annex 2

<sup>1</sup> “Disaster” means “natural disaster” in this PDM. Man-made disasters such as fire and chemical disasters are not included.  
<sup>2</sup> “Local authorities” refers to sub-district (or Tambon) administrations, municipalities, or other local administrations by law.

**Project Design Matrix (PDM)**

**Project Title: The Project on Capacity Development in Disaster Management (Phase-2) Period: 2010 - 2014 (4 years)**  
**Implementing Agency: Department of Disaster Prevention and Mitigation: DDPM, Co-Implementing Agency: Ministry of Education: MOE**  
**Target Groups: (direct) DDPM staff at central and provincial levels. (indirect) staff of local authorities and community people in the target areas.**  
**Target Provinces: Lampang and Lamphun Provinces, additionally CBDRM and disaster education is conducted in Nakhon Si Thammarat Province**

**Version 2**

(Version 2)

| Narrative Summary  | Objectively Verifiable Indicators   | Means of Verification   | Important Assumptions  |
|--|---|---|--|
| <p><b>Overall Goal (in 3-5 years after the Project ends):</b><br/>                     Implementation of disaster risk management activities is improved and scaled up.</p>  | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in all 76 provinces and revised (if necessary).</li> <li>2. All 76 provinces conduct table-top exercise (TTX) at least one district (Amphur) together with the province to verify the disaster prevention and mitigation action plan at local level.</li> <li>3. Evacuation plans are prepared by more than 100 communities every year (other than the Project target communities) with support of DDPM Regional Centers and Provincial offices.</li> <li>4. Disaster education is implemented by at least four schools. Each school functions as a learning center at the initiative of ESA Office in four major regions in Thailand, respectively.</li> </ol> | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans</li> <li>2. Evaluation report of TTX</li> <li>3. Evacuation plans</li> <li>4. Record of workshop report.</li> </ol>  |  |
| <p><b>Project Purpose (by the end of the Project)</b><br/>                     Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, Community Based Disaster Risk Management: CBDRM and disaster education, collaborating with concerned agencies, provincial and local levels.</p> | <ol style="list-style-type: none"> <li>3. Plans for up-scaling are included in the National Disaster Prevention and Mitigation Action Plan.</li> <li>4. Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the target provinces.</li> </ol>  | Disaster Prevention and Mitigation Action Plans   | Mission and responsibility of DDPM regarding disaster management is maintained by law. |
| <p><b>Outputs</b><br/> <b>&lt;Task force - Disaster Management Planning&gt;</b><br/>                     1. Disaster Prevention and Mitigation Action Plans with considerations for vulnerable people are formulated for national, provincial and local authorities (in the target provinces).</p>                       | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (target provinces) and local levels (At least 80 local authorities or 80% in Lampang and 45 local authorities or 80% in Lamphun).</li> </ol>   | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans at national, provincial and local levels</li> </ol>   |  |
| <p><b>&lt;Task force - CBDRM&gt;</b><br/>                     2. Capacity of DDPM staff as facilitators on implementation of Community Based Disaster Risk Management (CBDRM) is enhanced.</p>   | <ol style="list-style-type: none"> <li>2-1 CBDRM manuals and facilitator's guide developed by the JICA Project Phase I (for facilitators and for communities) are improved and are utilized in the target communities.</li> <li>2-2 Disaster training and educational materials (for facilitators and for communities) are improved and are utilized in the target communities.</li> <li>2-3 CBDRM action plan for implementation is developed by</li> </ol>  | <ol style="list-style-type: none"> <li>2-1-1 CBDRM manuals and activity reports</li> <li>2-1-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-2-1 Educational materials</li> <li>2-2-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-3 CBDRM implementation action plan and</li> </ol> |  |



|  |  |  |   |
|--|--|--|---|
| <p>&lt;Task force – Disaster Management Training &gt;<br/>3. Training curriculum at DPMA is improved.</p>  | <p>DDF.vi.<br/>3-1 At least one curriculum on disaster management on natural disaster (flood, flash flood and mud flow) for DDPM staff is improved.</p>  | <p>activity reports<br/>3-1 Curriculum</p>   |   |
| <p>&lt;Task force – Disaster Education&gt;<br/>4. Based on the Natural disaster preparedness educational curriculum, schools have improved preparedness for disaster.</p>  | <p>4-1 At least three schools in the target provinces implement disaster education on natural disasters as model schools supported by MOE headquarters and the first model schools from Phase I.<br/>4-2 100 teachers from natural disaster prone areas are trained on disaster education.</p> | <p>4-1 Record of model schools observation of classes<br/>4-2 Records of training, workshops and seminars (Number of participants, content of training, date, level of achievement, etc.)</p>  |   |
| <p><b>Activities</b><br/>0-0 DDPM, in consultation with the Japanese experts, selects target areas:<br/>➢ Model province A, Model community (MOOBAN) a1 and a2 in the model province A.<br/>➢ Model province B, Model community (MOOBAN) b1 in the model province B.<br/><b>&lt;TF Disaster Management Planning&gt;</b><br/>1-1 TF Disaster Management Planning designs capacity development plan on their activities and monitoring/ evaluation.<br/>1-2 TF conduct training for 300 DDPM staff at central, regional and provincial levels how to formulate disaster prevention and mitigation plans and action plans, focusing on priority items.<br/>1-3 DDPM staff at central and provincial levels review and/or develop provincial disaster prevention and mitigation plans, focusing on priority items, in consideration of vulnerable people for disasters, for the model province A, followed by the model province B.<br/>1-4 DDPM staff at central and provincial levels prepares national and provincial disaster prevention and mitigation action plans, and target local authorities in target provinces prepare local disaster prevention and mitigation action plans, focusing on priority items, in which method of up-scaling, staffing and budget are identified and incorporated in the model province A, followed by the model province B.<br/>1-5 TF conducts table-top exercises to revise disaster prevention and mitigation plans and action plans with concerned organizations.<br/>1-6 TF and concerned provincial staff modify disaster prevention and mitigation plans and action plans, based on the experience of table top exercises.<br/>1-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.<br/><b>&lt;TF CBDRM&gt;</b><br/>2-1 TF-CBDRM designs capacity development plan on TF-CBDRM activities and monitoring/evaluation.<br/>2-2 TF reviews and revises CBDRM manuals and facilitator's guide seeking comments from 76 provinces and tests them at the model community (MOOBAN) a1 and finalizes them for publication.</p> |  | <p><b>Inputs</b><br/><b>&lt;Thai side&gt;</b><br/>Counterparts<br/>Project Director<br/>Task force members<br/>Administrative staff<br/>Project office and facilities at DDPM<br/>Working space at MOE<br/>Operational costs<br/><b>&lt;Japanese Side&gt;</b><br/>Experts<br/>Disaster Management Plan<br/>Disaster Management Institution<br/>Sediment Disaster Management<br/>Flood Management<br/>Community Based Disaster Risk Management<br/>Disaster Education<br/>Counterpart Training in Japan<br/>Operational costs</p> | <p><b>Preconditions</b><br/>Human resources and budget necessary for the implementation of the Project are provided by the Thai side.</p> |

2-3 TF conducts training for at least 80 DDPM staff at central, regional and provincial levels to facilitate CBDRM.

2-4 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community (MOOBAN) a1 in collaboration with the local model school.

2-5 Trained DDPM provincial staff in the model province B facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community b1 in collaboration with the local model school.

2-6 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community a2 in the model province A in collaboration with the local model school.

2-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.

**<TF Disaster Management Training>**

3-1 TF-Disaster Management Training designs a capacity development plan for its activities and monitoring/evaluation.

3-2 TF develops guidelines for evaluation and monitoring of training.

3-3 TF conducts needs assessment for training in collaboration with other task forces.

3-4 TF revises standard disaster management curriculum in DPMA training courses on flood, flash flood and mud flow.

3-5 TF, in collaboration with concerned organizations, develops training modules and materials to synchronize training curriculum on disaster management (flood, flash flood and mud flow), CBDRM.

3-6 TF, in collaboration with concerned organizations, train master trainers for DDPM staff.

3-7 Master trainers train 100 DDPM staff of disaster management on flood, flash flood and mud flow.

3-8 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.

**<TF Disaster Education>**

4-1 DDPM and Ministry of Education discuss and agree on the roles of each agency to implement TF-disaster education activities.

4-2 TF in collaboration with OBEC develops model curriculum of disaster education in schools on flood, flash flood and mudflow.

4-3 TF in collaboration with OBEC modifies textbooks and teachers' guide.

4-4 TF selects one model school a1 in the model community a1, one model school a2 in the model community a2 in the model province A and one model school b1 in the model community b1 in the model province B for planning curriculum of school disaster education and conducting model lessons.

4-5 TF in collaboration with MOE trains 40 master teachers.

4-6 Master teachers train at least 100 teachers how to teach disaster education at schools in cooperation with local communities.

4-7 Master teachers conduct model classes for disaster education at the model school a1 in the model community

(MOOBAN) a1, followed by one model school a2 in model community a2 in model province A and one model school b1 in model community b1 in model province B.

4-8 Trained teachers by Master teachers conduct disaster education at their own schools.

4-9 TF in collaboration with MOE develops one model school as information center of disaster education, followed by two model schools in two provinces.

4-10 TF in collaboration with OBEC reviews the process and revises curriculum.

4-11 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.

## Project Design Matrix for TF5 (Flood Risk Management)

Annex 4

| Narrative Summary   | Objectively Verifiable Indicators   | Means of Verification   |
|---|---|---|
| <p><b>[Output]</b></p> <p>&lt;Task force – Flood Risk Management&gt;</p> <p>Knowledge and technical capacity of DDPM on hazard mapping, early warning system and design of structural measures are enhanced.</p>  | <p>5-1 Technical tutorial manuals on hydrologic analysis, flood modeling and hazard mapping are developed.</p> <p>5-2 Technical tutorial manuals on early warning system and structural measures for flood mitigation and prevention are developed.</p> <p>5-3 TF conducts training on hazard mapping, early warning system and structural measures targeting all of 18 DPM regional centers using the above manuals.</p> | <p>5-1 Tutorial manuals on hydrologic analysis, flood modeling and hazard mapping</p> <p>5-2 Tutorial manuals on early warning system and structural measures for flood mitigation and prevention</p> <p>5-3 Record of training (number of regional centers participating in the trainings)</p> |
| <p><b>[Activity]</b></p> <p>&lt;Task force – Flood Risk Management&gt;</p> <p>5-1 TF Hazard Mapping designs capacity development plan on its activities and monitoring/evaluation.</p> <p>5-2 TF selects one (1) model site in Lamphun or Lamphun provinces based on risk area maps which are being prepared by the both provinces.</p> <p>5-3 TF analyzes design rainfall and hydrograph of the model site using hydrologic/runoff analysis, and prepares a hazard map of the model site.</p> <p>5-4 TF prepares the technical tutorial manuals of hydrologic analysis, flood modeling and hazard mapping taking the model site as an example.</p> <p>5-5 TF evaluates the effect of flood control structures using flood analysis model, and prepare the technical tutorial manual on early warning system and plan/design of flood control structures.</p> <p>5-6 TF conducts training on hazard mapping, early warning system and structural measures targeting DPM regional centers using the above manuals.</p> |   |   |





**The members of the TF-5**

| <b>Name</b>                    | <b>Position</b>   |
|--------------------------------|---|
| <b>Mr. Suraphol Lekkao</b>     | <b>Director of Disaster Prevention Criteria Bureau, DDPM</b>                          |
| <b>Mr. Paitoon Naktae</b>      | <b>Chief of Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM</b> |
| <b>Mr. Monchai Manosamuth</b>  | <b>Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM</b>          |
| <b>Mr. Amnart Pholmart</b>     | <b>Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM</b>          |
| <b>Mr. Banyat Yaiqnoo Luam</b> | <b>Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM</b>          |
| <b>Mr. Somsak Wan-Seng</b>     | <b>Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM</b>          |
| <b>Mr. Kriruit Danpitak</b>    | <b>Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM</b>          |
| <b>Mr. Somchy Luengchatchi</b> | <b>Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM</b>          |
| <b>Ms. Ladda Noycomesin</b>    | <b>Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM</b>          |
| <b>Representative</b>          | <b>Department of Mineral Resources (DMR)</b>  |
| <b>Representative</b>          | <b>Royal Irrigation Department (RID)</b>  |
| <b>Representative</b>          | <b>Thai Meteorological Department (TMD)</b>   |
| <b>Representative</b>          | <b>Water Resources Department (RID)</b>   |
| <b>Representative</b>          | <b>Land Development Department (LDD)</b>  |

**MINUTES OF MEETING  
ON  
JOINT COORDINATING COMMITTEE  
FOR  
THE PROJECT  
ON  
CAPACITY DEVELOPMENT IN DISASTER MANAGEMENT  
IN THAILAND (PHASE-2)**

**AGREED UPON BETWEEN  
THE AUTHORITIES CONCERNED OF THE GOVERNMENT  
OF THE KINGDOM OF THAILAND  
AND  
JAPAN INTERNATIONAL COOPERATION AGENCY**

Bangkok, October 4, 2011

前原 規利

Mr. Noritoshi MAEHARA  
JICA Expert  
Japan International Cooperation Agency  
Japan

x W. Sangunpong

Mr. Wiboon Sangunpong  
Director -General  
Department of Disaster Prevention and  
Mitigation,  
Ministry of Interior

Churairat Sangboonnum

Ms. Churairat Sangboonnum  
Deputy Permanent Secretary of Education  
Ministry of Education

In response to the request of the Government of the Kingdom of Thailand, the Government of Japan has decided to conduct the technical cooperation concerning the "Project on Capacity Development in Disaster Management in Thailand (Phase 2)"(hereinafter referred to as "the Project"). The Japan side and the Thai side came to an agreement on the Record of Discussion (hereinafter referred to as "R/D") which was signed on March 9, 2010 between the Department of Disaster Prevention and Mitigation, Ministry of Interior (hereinafter referred to as "DDPM") and the Ministry of Education (hereinafter referred to as "MOE"), and Japan International Cooperation Agency (hereinafter referred to as "JICA"). Based on the R/D, JICA dispatched the Expert Team (hereinafter referred to as "the Team") headed by Mr. Noritoshi MAEHARA from June 7, 2010.

The Team and Thai Side (DDPM, MOE and other authorities concerned of the Project) discussed on 1) establishment of a new task force for flash flood risk management, 2) implementation of baseline and monitoring survey of CBDRM by the Research and Development Sub-bureau of DDPM, and 3) other matters in the third (3rd) Joint Coordinating Committee (hereinafter referred to as "JCC"). The list of the participants is attached as ANNEX-1. As a result of the discussion, the Team and Thai Side agreed upon the matters as follows:

1. **Establishment of Task Force - Flash Flood Risk Management**

Task Force - Flash Flood Risk Management (TF-5) will be established to enhance knowledge and technical capacity of DDPM on hazard mapping, early warning system and design of structural measures. The project activity will be started from October 2011. The project design matrix (PDM), plan of operation (PO), and member list of TF-5 are presented in ANNEX-2 and the integrated PDM Version 3 is shown in ANNEX-3.

2. **Baseline and Monitoring Survey of CBDRM**

In order to assess the present condition and the progress of disaster management capacity of the target communities, a series of baseline and monitoring surveys is indispensable. The baseline survey of the first two communities had been conducted by sub-contractor with social scientists.

However, since Research and Development Sub-bureau of DDPM is capable to conduct such survey, a series of baseline and monitoring surveys for the remaining two communities will be conducted by the officers of Research and Development Sub-bureau as the Inter-Task Force members of the Project.

**Annexes:**

- Annex 1 The list of the participants for the third (3rd) JCC
- Annex 2 Project Design Matrix, Plan of Operation, and member list of TF-5
- Annex 3 Project Design Matrix (Version 3)



## JCC Meeting Participant List as of October 4, 2011

- |                                  |   |
|----------------------------------|---|
| 1. Mr.Prateep Kiratirekha        | Deputy Director General, DDPM   |
| 2. Mr.Adthaporn Singhawichai     | Director RICB   |
| 3. Mr.Suwit Kosuwan              | Director of Active Fault Research Division, DMR   |
| 4. Mr.Sompop Sucharit            | Senior Expert/ General Inspector, RID   |
| 5. Ms.Sarat Leepaiboon           | OBEC, MOE   |
| 6. Mr.Somsong Ngamwong           | Permanent Secretary, MOE  |
| 7. Ms.Rungarn Punpukdee          | Foreign Relations Official, Permanent Secretary,<br>MOE   |
| 8. Ms.Watcharee Virapun          | Director of Weather Forecast Bureau, TMD  |
| 9. Mr.Supon Sodsoon              | Chief of Mekhala, DWR   |
| 10. Ms.Samorn Srisiri            | Social Worker, Office of Women's Affair and<br>Family Development<br>Ministry of Social Development and Human<br>Security |
| 11. Ms.Chutinan Phoomglin        | Social Worker, Office of Women's Affair and<br>Family Development<br>Ministry of Social Development and Human<br>Security |
| 12. Mr. Chayakorn Wittayawoch    | Social Worker, Office of Women's Affair and<br>Family Development<br>Ministry of Social Development and Human<br>Security |
| 13. Ms.Pantila Saengchan         | Program Development, TICA   |
| 14. Ms.Donhatai Jirasingh        | Development Cooperation Officer, TICA   |
| 15. Mr. Phuthon Chantanavivate   | Hydrologist, NDWC   |
| 16. Ms. Chachadaporn Boonperanat | Director Section c Natural Disaster, DDPM   |
| 17. Mr.Sittigorn Kwandee         | Plan and Policy Analyst, DDPM   |
| 18. Ms.Daowan Saeng- Ong         | Plan and Policy Analyst, DDPM   |
| 19. Mr.Natchanon Sonprasert      | Director Section of Participation Promotion,<br>DDPM  |
| 20. Mr.Kamonwan Chidpakdee       | Plan and Policy Analyst, DDPM   |
| 21. Ms.Oranuth Lo-unlum          | Plan and Policy Analyst, DDPM   |
| 22. Ms. Pallarin Phukit          | Plan and Policy Analyst, DDPM   |

- |                                 |  |
|---------------------------------|--|
| 23. Mrs .Krongpan Sudsai        | Scientist, DDPM                              |
| 24. Mr. Paitoon Naktae          | Chief of Standard Safety Division, DDPM      |
| 25. Mr. Amnart Polmart          | Civil Engineer, DDPM                         |
| 26. Mr. Sittiporn Petchdee      | Civil Engineer, DDPM                         |
| 27. Mrs. Ampaporn Kongkhane     | Plan and Policy Analyst, DDPM                |
| 28. Ms. Luckana Manimmanakorn   | Deputy Director of DPMA, DDPM                |
| 29. Mr. Raywat Pongsuwan        | Deputy Director of DPMA, DDPM                |
| 30. Mr. Chaitawat Siwabovorn    | Deputy Director of DPMA, DDPM                |
| 31. Mr. Kittikorn Thepyooamnuay | Chief of Technician Support side, DPMA, DDPM |
| 32. Ms.Paorumpai Janya          | Chief of Technician Side, DPMA, DDPM         |
| 33. Ms. Chakreeya Setthaseree   | Plan and Policy Analyst, DPMA, DDPM          |
| 34. Ms.Woraphak Krearjaiwang    | Plan and Policy Analyst, DDPM                |
| 35. Ms. Cha da Timjaras         | Plan and Policy Analyst, DDPM                |
| 36. Ms. Kamolwan Klubsri        | Plan and Policy Analyst, DDPM                |
| 37. Mrs. Panadda Puchareonsilp  | Chief of Foreign Relations Official, DDPM    |
| 38. Ms. Duangnapa Uttamangkpong | Foreign Relations Official, DDPM             |
| 39. Ms. Kornisnan Wilawan       | Plan and Policy Analyst, DDPM                |
| 40. Ms. Yaowapapan Khongkhasri  | Plan and Policy Officer, DDPM                |
| 41. Ms.Sippaka Bimol            | Plan and Policy Officer, DDPM                |
| 42. Mr. Hajime TANIGUCHI        | Representative,<br>JICA Thailand Office      |
| 43. Mr.Kobchai Songsrisanga     | Program Officer<br>JICA Thailand Office      |
| 44. Mr.Noritoshi Maehara        | Chief of JICA Expert                         |
| 45. Mr.Toru KOIKE               | JICA Expert                                  |

**Project Design Matrix for TF5 (Flash Flood Risk Management)**

| Narrative Summary  | Objectively Verifiable Indicators  | Means of Verification  |
|--|--|--|
| <p><b>[Output]</b></p> <p>&lt;Task force - Flash Flood Risk Management&gt;<br/>                     Knowledge and technical capacity of DDPM on hazard mapping, early warning system and design of structural measures are enhanced.</p>   | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping are developed.</p> <p>5-2 Manuals on early warning system and structural measures for flood mitigation and prevention are developed.</p> <p>5-3 Training targeting on all of 18 DPM regional centers using the above manuals.</p> | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping</p> <p>5-2 Manuals on early warning system and structural measures.</p> <p>5-3 Record of training (number of regional centers participating in the trainings)</p> |
| <p><b>[Activity]</b></p> <p>&lt;Task force - Flash Flood Risk Management&gt;</p> <p>5-1 TF designs capacity development plan on its activities and monitoring/evaluation.</p> <p>5-2 TF selects one sub-basin model site in Lampang or Lamphun province based on GIS base risk area maps which are being prepared by DDPM..</p> <p>5-3 TF prepares manuals for rainfall / flood analysis and hazard mapping through the process of the practical training taking the model site as an example.</p> <p>5-4 TF prepares manuals for improvement of early warning system and for evaluation of structural measures, in which the result of 5-3 will be functionally utilized.</p> <p>5-5 TF conducts training on hazard mapping, early warning system and structural measures targeting DPM regional centers using the above manuals.</p> |  |  |



The members of the TF-5

| Name                    | Position   |
|-------------------------|--|
| Mr. Suraphol Lekkao     | Director of Disaster Prevention Criteria Bureau, DDPM                          |
| Mr. Paitoon Naktae      | Chief of Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM |
| Mr. Monchai Manosamuth  | Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM          |
| Mr. Amnart Pholmart     | Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM          |
| Mr. Banyat Yaiqnoo Luam | Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM          |
| Mr. Somsak Wan-Seng     | Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM          |
| Mr. Kriruit Danpitak    | Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM          |
| Mr. Somchy Luengchatchi | Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM          |
| Ms. Ladda Noycomesin    | Safety Standard Sub-Bureau, Disaster Prevention Criteria Bureau, DDPM          |
| Representative          | Department of Mineral Resources (DMR)  |
| Representative          | Royal Irrigation Department (RID)  |
| Representative          | Thai Meteorological Department (TMD)   |
| Representative          | Water Resources Department (RID)   |
| Representative          | Land Development Department (LDD)  |





## Project Design Matrix (PDM)

**Project Title: The Project on Capacity Development in Disaster Management (Phase-2)** Period: 2010 - 2014 (4 years)  
 Implementing Agency: Department of Disaster Prevention and Mitigation: DDPM, Co-Implementing Agency: Ministry of Education: MOE  
 Target Groups: (direct) DDPM staff at central and provincial levels. (indirect) staff of local authorities and community people in the target areas.  
 Target Provinces: Lamphun and Lamphun Provinces, additionally CBDRM and disaster education is conducted in Nakhon Si Thammarat Province

# Version 3

(Version 3)

| Narrative Summary  | Objectively Verifiable Indicators   | Means of Verification   | Important Assumptions  |
|--|---|---|--|
| <p><b>Overall Goal (in 3-5 years after the Project ends):</b><br/>                     Implementation of disaster risk management activities is improved and scaled up.</p>  | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in all <b>76</b> provinces and revised (if necessary).</li> <li>2. All <b>76</b> provinces conduct table-top exercise (TTX) at least one district (Amphur) together with the province to verify the disaster prevention and mitigation action plan at local level.</li> <li>3. Evacuation plans are prepared by more than <b>100</b> communities every year (other than the Project target communities) with support of DDPM Regional Centers and Provincial offices.</li> <li>4. Disaster education is implemented by at least <b>four</b> schools. Each school functions as a learning center at the initiative of ESA Office in four major regions in Thailand, respectively.</li> </ol> | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans</li> <li>2. Evaluation report of TTX</li> <li>3. Evacuation plans</li> <li>4. Record of workshop report.</li> </ol>  |  |
| <p><b>Project Purpose (by the end of the Project)</b><br/>                     Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, Community Based Disaster Risk Management, CBDRM and disaster education, collaborating with concerned agencies, provincial and local levels.</p> | <ol style="list-style-type: none"> <li>1. Plans for up-scaling are included in the National Disaster Prevention and Mitigation Action Plan.</li> <li>2. Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the target provinces.</li> </ol>  | Disaster Prevention and Mitigation Action Plans   | Mission and responsibility of DDPM regarding disaster management is maintained by law. |
| <p><b>Outputs</b><br/>                     &lt;Task force – Disaster Management Planning&gt;<br/>                     1. Disaster Prevention and Mitigation Action Plans formulated for national, provincial and local authorities (in the target provinces).</p>  | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (target provinces) and local levels (At least <b>80</b> local authorities or <b>80%</b> in Lamphun and <b>45</b> local authorities or <b>80%</b> in Lamphun).</li> </ol>   | <ol style="list-style-type: none"> <li>1. Disaster Prevention and Mitigation Action Plans at national, provincial and local levels</li> </ol>   |  |
| <p>&lt;Task force - CBDRM&gt;<br/>                     2. Capacity of DDPM staff as facilitators on implementation of Community Based Disaster Risk Management (CBDRM) is enhanced.</p>  | <ol style="list-style-type: none"> <li>2-1 CBDRM manuals and facilitator's guide developed by the JICA Project Phase I (for facilitators and for communities) are improved and are utilized in the target communities.</li> <li>2-2 Disaster training and educational materials (for facilitators and for communities) are improved and are utilized in the target communities.</li> </ol>  | <ol style="list-style-type: none"> <li>2-1-1 CBDRM manuals and activity reports</li> <li>2-1-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> <li>2-2-1 Educational materials</li> <li>2-2-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)</li> </ol> |  |

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| <p>&lt;Task force – Disaster Management Training &gt;<br/>3. Training curriculum at DPMA is improved.</p>   | <p>2-3 CBDRM action plan for implementation is developed by DDPM.</p>   | <p>2-3 CBDRM implementation action plan and activity reports</p>   |  |
| <p>&lt;Task force – Disaster Education&gt;<br/>4. Based on the Natural disaster preparedness educational curriculum, schools have improved preparedness for disaster.</p>   | <p>3-1 At least one curriculum on disaster management on natural disaster (flood, flash flood and mud flow) for DDPM staff is improved.</p> <p>4-1 At least three schools in the target provinces implement disaster education on natural disasters as model schools supported by MOE headquarters and the first model schools from Phase 1.</p> <p>4-2 100 teachers from natural disaster prone areas are trained on disaster education.</p> | <p>3-1 Curriculum</p> <p>4-1 Record of model schools observation of classes</p> <p>4-2 Records of training, workshops and seminars (Number of participants, content of training, date, level of achievement, etc.)</p>           |  |
| <p>&lt;Task force – Flash Flood Risk Management&gt;<br/>5. Knowledge and technical capacity of DDPM on hazard mapping, early warning system and design of structural measures are enhanced..</p>  | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping are developed.</p> <p>5-2 Manuals on early warning system and structural measures for flood mitigation and prevention are developed.</p> <p>5-3 Training targeting on all of 18 DPM regional centers using the above manuals.</p>  | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping</p> <p>5-2 Manuals on early warning system and structural measures.</p> <p>5-3 Record of training (number of regional centers participating in the trainings)</p> |  |
| <p><b>Activities</b></p> <p>0-0 DDPM, in consultation with the Japanese experts, selects target areas:</p> <ul style="list-style-type: none"> <li>&gt; Model province A, Model community (MOOBAN) a1 and a2 in the model province A.</li> <li>&gt; Model province B, Model community (MOOBAN) b1 in the model province B.</li> </ul> <p>&lt;TF Disaster Management Planning&gt;</p> <p>1-1 TF Disaster Management Planning designs capacity development plan on their activities and monitoring/ evaluation.</p> <p>1-2 TF conduct training for 300 DDPM staff at central, regional and provincial levels how to formulate disaster prevention and mitigation plans and action plans, focusing on priority items.</p> <p>1-3 DDPM staff at central and provincial levels review and/or develop provincial disaster prevention and mitigation plans, focusing on priority items, in consideration of vulnerable people for disasters, for the model province A, followed by the model province B.</p> <p>1-4 DDPM staff at central and provincial levels prepares national and provincial disaster prevention and mitigation action plans, and target local authorities in target provinces prepare local disaster prevention and mitigation action plans, focusing on priority items, in which method of up-scaling, staffing and budget are identified and incorporated in the model province A, followed by the model province B.</p> <p>1-5 TF conducts table-top exercises to revise disaster prevention and mitigation plans and action plans with concerned</p> | <p><b>Inputs</b></p> <p>&lt;Thai side&gt;</p> <p>Counterparts<br/>Project Director<br/>Project Manager<br/>Task force members<br/>Administrative staff</p> <p>Project office and facilities at DDPM<br/>Working space at MOE</p> <p>Operational costs</p> <p>&lt;Japanese Side&gt;</p> <p>Experts<br/>Disaster Management Plan<br/>Disaster Management Institution<br/>Sediment Disaster Management<br/>Flood Management</p>                  | <p><b>Preconditions</b></p> <p>Human resources and budget necessary for the implementation of the Project are provided by the Thai side.</p>   |  |



|   |  |  |
|---|--|--|
| <p>organizations.</p> <p>1-6 TF and concerned provincial staff modify disaster prevention and mitigation plans and action plans, based on the experience of table top exercises.</p> <p>1-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF CBDRM&gt;</p> <p>2-1 TF-CBDRM designs capacity development plan on TF-CBDRM activities and monitoring/evaluation.</p> <p>2-2 TF reviews and revises CBDRM manuals and facilitator's guide seeking comments from 76 provinces and tests them at the model community (MOOBAN) a1 and finalizes them for publication.</p> <p>2-3 TF conducts training for at least 80 DDPM staff at central, regional and provincial levels to facilitate CBDRM.</p> <p>2-4 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community (MOOBAN) a1 in collaboration with the local model school.</p> <p>2-5 Trained DDPM provincial staff in the model province B facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community b1 in collaboration with the local model school.</p> <p>2-6 Trained DDPM provincial staff in the model province A facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at model community a2 in the model province A in collaboration with the local model school.</p> <p>2-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF Disaster Management Training&gt;</p> <p>3-1 TF-Disaster Management Training designs a capacity development plan for its activities and monitoring/evaluation.</p> <p>3-2 TF develops guidelines for evaluation and monitoring of training.</p> <p>3-3 TF conducts needs assessment for training in collaboration with other task forces.</p> <p>3-4 TF revises standard disaster management curriculum in DPMA training courses on flood, flash flood and mud flow.</p> <p>3-5 TF, in collaboration with concerned organizations, develops training modules and materials to synchronize training curriculum on disaster management (flood, flash flood and mud flow). CBDRM.</p> <p>3-6 TF, in collaboration with concerned organizations, train master trainers for DDPM staff.</p> <p>3-7 Master trainers train 100 DDPM staff of disaster management on flood, flash flood and mud flow.</p> <p>3-8 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF Disaster Education&gt;</p> <p>4-1 DDPM and Ministry of Education discuss and agree on the roles of each agency to implement TF-disaster education activities.</p> | <p>Community Based Disaster Risk Management<br/>Disaster Education</p> <p>Counterpart Training in Japan</p> <p>Operational costs</p> |  |
|---|--|--|

|  |   |
|--|---|
|  |   |
|  | <p>4-2 TF in collaboration with OBEC develops model curriculum of disaster education in schools on flood, flash flood and mudflow.</p> <p>4-3 TF in collaboration with OBEC modifies textbooks and teachers' guide.</p> <p>4-4 TF selects one model school a1 in the model community a1, one model school a2 in the model community a2 in the model province A and one model school b1 in the model community b1 in the model province B for planning curriculum of school disaster education and conducting model lessons.</p> <p>4-5 TF in collaboration with MOE trains 40 master teachers.</p> <p>4-6 Master teachers train at least 100 teachers how to teach disaster education at schools in cooperation with local communities.</p> <p>4-7 Master teachers conduct model classes for disaster education at the model school a1 in the model community (MOOBAN) a1, followed by one model school a2 in model community a2 in model province A and one model school b1 in model community b1 in model province B.</p> <p>4-8 Trained teachers by Master teachers conduct disaster education at their own schools.</p> <p>4-9 TF in collaboration with MOE develops one model school as information center of disaster education, followed by two model schools in two provinces.</p> <p>4-10 TF in collaboration with OBEC reviews the process and revises curriculum.</p> <p>4-11 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.</p> <p>&lt;TF Flash Flood Risk Management&gt;</p> <p>5-1 TF designs capacity development plan on its activities and monitoring/evaluation.</p> <p>5-2 TF selects one sub-basin model site in Lamphun or Lamphun province based on GIS base risk area maps which are being prepared by DDPM..</p> <p>5-3 TF prepares manuals for rainfall / flood analysis and hazard mapping through the process of the practical training taking the model site as an example.</p> <p>5-4 TF prepares manuals for improvement of early warning system and for evaluation of structural measures, in which the result of 5-3 will be functionally utilized.</p> <p>5-5 TF conducts training on hazard mapping, early warning system and structural measures targeting DPM regional centers using the above manuals.</p> |

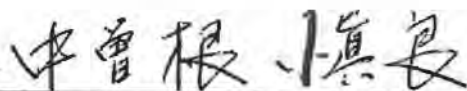
**MINUTES OF MEETING**  
**BETWEEN**  
**JAPAN INTERNATIONAL COOPERATION AGENCY**  
**AND**  
**THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF**  
**THE KINGDOM OF THAILAND**  
**ON**  
**JAPANESE TECHNICAL COOPERATION**  
**FOR**  
**THE PROJECT ON CAPACITY DEVELOPMENT IN DISASTER MANAGEMENT IN**  
**THAILAND (PHASE 2)**

The Japanese Mid-term Review Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Shiro Nakasone, visited the Kingdom of Thailand from February 6 to February 23, 2012, for the purpose of conducting the Mid-term Review of "the Project on Capacity Development in Disaster Management in Thailand (Phase 2)" (hereinafter referred to as "the Project").

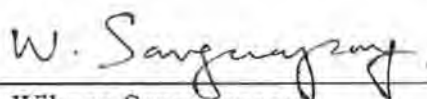
The Team exchanged the views and had a series of discussions on the Project with the authorities concerned of the Government of the Kingdom of Thailand. (hereinafter refer to as "Thai side")

As a result of review and analysis of the activities and progress of the Project, both the Team and Thai side agreed to the matters referred to in the documents attached hereto and forward it to the respective governments.

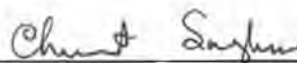
Bangkok, February 23, 2012



Mr. Shiro Nakasone  
Leader  
Mid-Term Review Team  
Japan International Cooperation Agency



Mr. Wiboon Sanguanpong  
Director-General  
Department of Disaster Prevention and  
Mitigation,  
Ministry of Interior



Ms. Churairat Sangboonnum  
Deputy Permanent Secretary of Education  
Ministry of Education



JOINT EVALUATION REPORT  
(MID-TERM REVIEW)

THE JAPANESE TECHNICAL COOPERATION

THE PROJECT ON CAPACITY DEVELOPMENT  
IN DISASTER MANAGEMENT IN THAILAND (PHASE 2)

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
JAPAN

MINISTRY OF INTERIOR AND MINISTRY OF EDUCATION  
KINGDOM OF THAILAND

FEBRUARY 23, 2012

*W. Sangyong*  
*Chit Sangha*  
*OK*

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## List of Abbreviations

|       |  |
|-------|--|
| BMA   | Bangkok Metropolitan Administration              |
| CBDRM | Community Based Disaster Risk Management         |
| DDPM  | Department of Disaster Prevention and Mitigation |
| DOLA  | Department of Local Administration               |
| DPM   | Disaster Prevention and Mitigation               |
| DPMA  | Disaster Prevention and Mitigation Academy       |
| DPMPB | Disaster Prevention and Mitigation Policy Bureau |
| DPPB  | Disaster Prevention Promotion Bureau             |
| DWR   | Department of Water Resources                    |
| ESAO  | Education Service Area Office                    |
| JCC   | Joint Coordination Committee                     |
| JICA  | Japan International Cooperation Agency           |
| M/M   | Minutes of Meeting                               |
| m/m   | Man/Month  |
| MOA   | Ministry of Agriculture                          |
| MOE   | Ministry of Education                            |
| NESDB | National Economic and Social Development Board   |
| NGO   | Non-Governmental Organization                    |
| OBEC  | Office of Basic Education Commission             |
| PDM   | Project Design Matrix                            |
| PO    | Plan of Operation                                |
| R/D   | Record of Discussion                             |
| RID   | Royal Irrigation Department                      |
| SAO   | Sub-Division Administrative Office               |
| TF    | Task Force                                       |
| TICA  | Thai International Department Cooperation Agency |
| TMD   | Thai Meteorological Department                   |
| TTX   | Table-Top Exercise                               |

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## **1. Introduction**

### **1.1 Objectives of the mid-term review**

The joint mid-term review was conducted with the following objectives:

- (1) to verify and evaluate the outputs and achievements of the Project;
- (2) to provide recommendations on the project activities for the remaining period; and
- (3) to draw lessons learned for implementing similar projects in the future.

### **1.2 Methodology**

#### (1) Joint mid-term review

The Project was jointly evaluated by Thai and Japanese review teams. The review activities included report analysis and interviews with project members. The review follows the Japan International Cooperation Agency (JICA) Guideline for Project Evaluation and is based on the five evaluation criteria: relevance, effectiveness, efficiency, impact and sustainability (see Annex 1).

#### (2) 5 Evaluation Criteria

##### 1) Relevance

Relevance refers to the integrity and necessity; whether the project purpose meets the needs of the intended beneficiaries; whether it is consistent with Thai's policies, and Japan's aid policies; and whether the approach of the project is appropriate.

##### 2) Effectiveness

Effectiveness refers to the extent to which the project purpose has been achieved to benefit the beneficiaries and target societies.

##### 3) Efficiency

Efficiency refers mainly to the relationship between the costs and outputs; whether input resources have been utilized effectively or not.

##### 4) Impact

Impact refers to the long-term effects and ripple effects brought by the implementation of a project; including the achievement level of the overall goal and unintended positive and negative effects.

##### 5) Sustainability

Sustainability refers to the extent to which the achievements of the Project would be further continued or expanded after the completion of cooperation.

### **1.3 Members of the joint mid-term review team**

The members of the joint mid-term review team (the Team) are shown below. There are 5

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members from Thai side – Department of Disaster Prevention and Mitigation (DDPM) and the Ministry of Education (MOE), and three members from Japanese side. In total, 8 persons took part in conducting the joint review of the Project.

(1) Thai team

| Role in the team | Name                        | Position/Organization   |
|------------------|-----------------------------|---|
| Co-team leader   | Mr. Adthaporn Singhawichai  | Director, Research and International Cooperation Bureau, DDPM             |
| Member           | Ms. Panadda Pucharoensilp   | Director, Research and International Cooperation Bureau, DDPM             |
| Member           | Ms. Duangnapa Uttamangkpong | Research and International Cooperation Bureau, DDPM                       |
| Member           | Ms. Kornisnam Wilawam       | Research and International Cooperation Bureau, DDPM                       |
| Member           | Mr. Somsong Ngamwong        | Chief, International Cooperation Unit, Office of Permanent Secretary, MOE |

(2) Japanese team

| Role in the team                               | Name               | Position, Organization  |
|--|--------------------|---|
| Team Leader                                    | Mr. Shiro Nakasone | Director, Disaster Management Division 1, Water Resources and Disaster Management Group, Global Environment Department, JICA        |
| Planning and Coordination/ Disaster Management | Ms. Yuki Tanaka    | Program Officer, Disaster Management Division 1, Water Resources and Disaster Management Group, Global Environment Department, JICA |
| Evaluation Analysis                            | Ms. Kinuko Mitani  | Consultant, IC Net Limited  |

**1.4 Schedule of the mid-term review**

The joint mid-term review was conducted from 6 February to 23 February 2012. The detailed schedule of the evaluation is attached as Annex 2.

**2. Outline of the project**

**2.1 Background of the Project**

The Government of the Kingdom of Thailand (Thai Government) has contented with enhancement of disaster prevention and mitigation by having established DDPM in 2002 and Disaster Prevention and Mitigation Academy (DPMA) in 2004 under the Ministry of Interior. The main responsibility of DDPM was general disaster management including disaster prevention and emergency responses. DDPM was still a relatively newly established organization and its capacity and experience are developing to cope with natural disasters in Thailand by collaborating with concerned various Ministries/departments. There was a

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pressing need to develop the capacity of DDPM.

The Government of Japan (Japanese Government) assisted the Thai Government for implementation of The Project on Capacity Development in Disaster Management in Thailand (Phase 1)<sup>1</sup> from August 2006 to August 2008. The main target of Phase 1 was DDPM and Office of the Basic Education Committee (OBEC) under the MOE at national level as well as communities. Hence, capacity development of DDPM and OBEC at regional and provincial levels as well as local authorities<sup>2</sup> was provided under Phase 1 at very minimal level. In order to improve and scale up disaster prevention and mitigation capacity in Thailand, it was indispensable to involve DDPM and OBEC at regional and provincial levels. Similarly, there was a need to develop capacity of local authorities so that they act as disaster management facilitators. In 2008, the Thai Government requested the Japanese Government to plan and implement the second phase of the Project on Capacity Development in Disaster Management (the Project)<sup>3</sup>. In response to the request, the Japanese Government agreed to provide necessary assistance. The Meeting of Minutes (M/M) of The Project was signed in October 2009. The Record of Discussion (R/D) of the Project in March 2010. The duration of the project was planned for four years (June 2010 to May 2014). The actual duration of the project is from June 2010 to May 2014.

## 2.2 Project overview

The Project revised the Project Design Matrix (PDM) a few times. At the time of mid-term review, PDM (Version 4) was drafted to reflect the actual project activities as well as expected outputs (see Annex 3). Version 4 was approved by the Joint Coordination Committee (JCC) Meeting held on February 23, 2012. The changes from Version 1 to Version 3 as well as Version 3 to Version 4 are highlighted below.

### 2.2.1 Overall Goal

The overall goal of the Project as well as the objectively verifiable indicators to measure the achievement levels of the overall goal are shown below. The indicators of the overall goal were changed during the project implementation as shown in Table 1.

<sup>1</sup> In this report, The Project on Capacity Development in Disaster Management in Thailand is referred as Phase 1.

<sup>2</sup> In this report, local authorities mean government bodies at Municipality level (Tedsabaan) and sub-district level (Obbortor).

<sup>3</sup> In this report, Phase 2 of The Project on Capacity Development in Disaster Management in Thailand is referred as the Project.

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*Chant Sanyam*

Table 1 Overall goal of the Project – Plan and Actual

| Narrative Summary                 | Plan (Version 1*)  | Actual (Version 3)  | Version 4   |
|-----------------------------------|--|---|---|
| Overall Goal                      | Implementation of disaster risk management activities is improved and scaled up.   | No change   | No change   |
| Objectively Verifiable Indicators | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in all 76 provinces including Bangkok.</li> <li>2. Evacuation plans are prepared by more than 100 communities every year (other than project target communities) with support of DDPM Regional Centers and Provincial offices.</li> <li>3. Disaster education is implemented by at least Y schools.</li> </ol> | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in all 76 provinces and revised (if necessary).</li> <li>2. All 76 provinces conduct table-top exercise (TTX) at least one district (Amphur) together with the province to verify the disaster prevention and mitigation action plan at local level.</li> <li>3. Evacuation plans are prepared by more than 100 communities every year (other than project target communities) with support of DDPM Regional Centers and Provincial offices.</li> <li>4. Disaster education is implemented by at least 4 schools. Each school functions as a learning center at the initiative of Education Service Area Office (ESAO) in 4 major regions in Thailand, respectively.</li> </ol> | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in all 76 provinces and Bangkok Metropolitan Administration (BMA), and revised (if necessary).</li> <li>2. All 76 provinces and BMA conduct table-top exercise (TTX) at least one municipality (Tedsabann)/ Sub-district (Tambon) Administrative Organization (SAO) (Oobortor) together with the province to verify the disaster prevention and mitigation action plan at local level.</li> <li>3. No change</li> <li>4. No change</li> </ol> |

\*Modifications are indicated as bold letters.

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### 2.2.2 Project Purpose

The project purpose as well as the objectively verifiable indicators to measure the achievement levels of the project purpose are shown below. There is no change made to the project purpose and the indicators as shown in Table 2.

Table 2 Project purpose of the Project – Plan and Actual

| Narrative Summary                 | Plan (Version 1*)  | Actual (Version 3) | Version 4   |
|-----------------------------------|--|--------------------|---|
| Project Purpose                   | Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, Community Based Risk Management (CBDRM) and disaster education, collaborating with concerned agencies, provincial and local levels.  | No change.         | No change   |
| Objectively Verifiable Indicators | <ol style="list-style-type: none"> <li>Plans for up-scaling are included in the National Disaster Prevention and Mitigation Action Plan.</li> <li>Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the target provinces.</li> </ol> | No change.         | <ol style="list-style-type: none"> <li>No change</li> <li>Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the model provinces.</li> </ol> |

### 2.2.3 Outputs

The original outputs for the Project were four as shown in Table 3. In regard to Output 1 to 4, there is no change made to the outputs and indicators. After the project commenced, Output 5 'knowledge and technical capacity of DDPM on hazard mapping, early warning system and design of structural measures are enhanced' was added as shown in Table 3. Change in the name of TF 5 from Flash Flood Risk Management to Flood Risk Management was made at the time of mid-term review. Reason for change in the name was to reflect the actual activities of TF 5, which cover studies and analysis of not only flash flood but also flood.

Table 3 Outputs of the Project – Actual and Plan

| Narrative Summary  | Plan (Version 1*)  | Actual (Version 3) | Version 4  |
|--|--|--------------------|--|
| <b>Output 1: Task Force – Disaster Management Planning</b> |  |                    |  |
|  | Disaster Prevention and Mitigation Action Plans with considerations for vulnerable | No change.         | Disaster Prevention and Mitigation Action Plans with considerations for vulnerable |

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|                                   |  |            |   |
|-----------------------------------|--|------------|---|
|                                   | people are formulated for national, provincial and local authorities (in the target provinces).  |            | people are formulated for national, provincial and local authorities (in the model provinces).  |
| Objectively Verifiable Indicators | Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (target provinces) and local levels (At least 80 local authorities or 80% in Lampang and 45 local authorities or 80% in Lamphun). | No change. | Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (model provinces) and local levels (At least 80 local authorities or 80% in Lampang and 45 local authorities or 80% in Lamphun). |

**Output 2: Task Force – CBDRM**

|                                   |  |            |   |
|-----------------------------------|--|------------|---|
|                                   | Capacity of DDPM staff as facilitators on implementation of CBDRM is enhanced.   | No change. | No change   |
| Objectively Verifiable Indicators | 2-1 CBDRM manuals and facilitator's guide developed by the JICA Project Phase I (for facilitators and for communities) are improved and are utilized in the target communities.<br>2-2 Disaster training and educational materials (for facilitators and for communities) are improved and are utilized in the target communities.<br>2-3 CBDRM action plan for implementation is developed by DDPM. | No change. | 2-4 Lessons learned are obtained from the baseline and monitoring surveys and utilized to improve the capacity of CBDRM facilitators. |

**Output 3: Task Force – Disaster Management Training**

|                                   |  |            |           |
|-----------------------------------|--|------------|-----------|
|                                   | Training curriculum at DPMA is improved.   | No change. | No change |
| Objectively Verifiable Indicators | At least one curriculum on disaster management on natural disaster (flood, flash flood and mud flow) for DDPM staff is improved. | No change. | No change |

**Output 4: Task Force – Disaster Education**

|  |  |            |           |
|--|--|------------|-----------|
|  | Based on the National disaster preparedness educational curriculum, schools have improved preparedness for | No change. | No change |
|--|--|------------|-----------|

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|                                   |   |            |           |
|-----------------------------------|---|------------|-----------|
|                                   | disaster.   |            |           |
| Objectively Verifiable Indicators | 4-1 At least three schools in the target provinces implement disaster education on natural disaster as model schools supported by the MOE headquarters and the first model schools from Phase I.<br>4-2 100 teachers from natural disaster prone areas are trained on disaster education. | No change. | No change |

**Output 5: Task Force – Flood Risk Management**

|                                   |   |   |           |
|-----------------------------------|---|---|-----------|
|                                   | - | Knowledge and technical capacity of DDPM on hazard mapping, early warning system and design of structural measures are enhanced.  | No change |
| Objectively Verifiable Indicators | - | 5-1 Manuals on rainfall/flood analysis and hazard mapping are developed.<br>5-2 Manuals on early warning system and structural measures for flood mitigation and prevention are developed.<br>5-3 Training targeting on all of 18 DPM regional centers using the above manuals. | No change |

\*At the time of project planning, PDM (Version 0) was developed without specific figures stated as indicators. Hence, the PDM (Version 1), which stated specific figures as indicators is used.

One activity as 0-1, which is targeting all TFs is added. The activity is ‘DDPM and the MOE develop a master integrated inventory list to monitor progress and achievement levels of activities such as development of DPM action plan in 76 provinces and Bangkok and implementation of CBDRM in all prone communities from DDPM side, and disaster education in all schools from the MOE side’.

**2.2.4 Beneficiaries**

Direct beneficiaries of the Project are DDPM staff members at central and provincial levels. Indirectly, the Project will be beneficial to staff members of local authorities and community members in the target areas.

**3. Inputs provided to the Project**

In the R/D including the project framework, which is called as Project Design Matrix (PDM) stated the inputs to be provided from both Thai and Japanese sides for project implementation.

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### 3.1 Japanese side

As stated in the R/D, experts from Japan were dispatched to the Project as shown below. After the project commenced, a need to add an expert whose specialty is disaster management table-top exercise (TTX) was identified by both Thai and Japanese sides. Hence, Disaster management exercise expert was dispatched to the Project. Details of the actual duration of dispatch and the Plan of Operation are shown in Annex 4.

At the time of mid-term review, 54.59 man/month (m/m) out of 64.00 m/m (in Thailand), is estimated to be spent by the end of the second year of the Project.

#### (1) Inputs from Japanese side – in Thailand

| Expert  | Plan (m/m)   | Actual* (m/m) |
|---|--------------|---------------|
| Team leader / Disaster management institution | 16.50        | 13.80         |
| Sub-team leader / Disaster management plan    | 12.50        | 9.00          |
| Sediment disaster management                  | 5.00         | 6.13          |
| Flood management                              | 5.00         | 7.63          |
| Community based disaster risk management 1    | 12.00        | 7.70          |
| Community based disaster risk management 2    | 11.50        | 6.50          |
| Disaster education                            | 13.00        | 9.00          |
| Disaster management exercise                  | 0.00         | 1.33          |
| <b>TOTAL</b>                                  | <b>64.00</b> | <b>54.59</b>  |

\*Actual shows the total m/m spent during Year 1 and 2 of the project period.

At the time of mid-term review, 0.67 m/m out of 1.00 m/m (in Japan), is estimated to be spent by the end of the second year of the project implementation.

#### (2) Inputs from Japanese side – in Japan

| Expert  | Plan (m/m)  | Actual* (m/m) |
|---|-------------|---------------|
| Team leader / Disaster management institution | 0.83        | 0.50          |
| Sub-team leader / Disaster management plan    | 0.17        | 0.17          |
| <b>TOTAL</b>                                  | <b>1.00</b> | <b>0.67</b>   |

\*Actual shows the total m/m spent during Year 1 and 2 of the project period.

Four special lecturers were dispatched from Japanese side to introduce experiences of Japanese disaster education and volunteer-based DRM promotion in Thailand as shown in Table 4.

Table 4 List of special lecturers

| Special lecturer | Position, Organization  | Period of dispatch             |
|------------------|---|--------------------------------|
| Ms. Hiroko Kondo | Disaster education supervisor, Disaster Mitigation Research Center, Nagoya University | August 29 – September 11, 2011 |

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|                     |  |                        |
|---------------------|--|------------------------|
| Mr. Sumio Hayakawa  | Chairman, Aichi Disaster Preparedness Leaders Association (APLA) | February 13 – 18, 2012 |
| Mr. Katsuhisa Fujii | Member, APLA   | February 13 – 18, 2012 |
| Ms. Aya Hamabe      | Member, APLA   | February 13 – 18, 2012 |

In addition to the dispatch of experts and special lecturers, the followings were provided under the Project. Details of the followings are attached as Annex 5.

- Training in Japan
- Site visit to Indonesia
- Procurement of equipment

### 3.2 Thai side

As planned, Thai side allocated project director, project manager and TF leaders as shown in Table 5. Details of the TF members are shown in Annex 6.

Table 5 List of key project members from Thai side – at the time of joint mid-term review

| Counterpart           | Name                              | Post, Organization   |
|-----------------------|-----------------------------------|--|
| Project Director      | Mr. Wiboon Sanguanpong            | Director General, DDPM   |
| Project Manager       | Acting Pol. Lt. Artit Boonyasopat | Deputy Director General, DDPM                                      |
| Secretary             | Mr. Adthaporn Singhawichai        | Director, Research and International Cooperation Bureau, DDPM      |
| Task Force Leader – 1 | Mr. Montree Chanachaiwibonwat     | Director, Disaster Prevention and Mitigation Bureau, DDPM          |
| Task Force Leader – 2 | Mr. Songchai Rohitachart          | Director, Disaster Prevention Promotion Bureau, DDPM               |
| Task Force Leader – 3 | Mr. Pompoth Penpas                | Director, DPMA, DDPM   |
| Task Force Leader – 4 | Ms. Churairat Sangboonnum         | Deputy Permanent Secretary, Office of the Permanent Secretary, MOE |
| Task Force Leader – 5 | Mr. Suraphol Lekkao               | Director, Disaster Prevention Criteria Bureau, DDPM                |

Project office was also allocated in DDPM building. A photocopy machine, which was procured under Phase 1 was provided to the Project. Office space in the MOE was also made available to the expert. Similarly, utilities such as electricity and water used in the project office are provided by DDPM and the MOE. In addition, issuance of identification cards for the experts, traveling expenses of staff members of DDPM and the MOE to participate the project activities, material printing cost for trainings/workshops/seminars, expenses such as venue and food for trainings/workshops/seminars, services to install or set up the small-scale measures in the model communities, and transportation services for activities at the project sites.

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*Chief of Staff*



#### 4. Achievements and implementation process of the project

The Project is carrying out the planned activities to achieve the following 5 expected outputs. The progress of the Project is explained below.

##### 4.1 Outputs

Progress of each TF is highlighted in Table 6. In the Project, TF 1 is responsible for Output 1, TF 2 for Output 2, TF 3 for Output 3, TF 4 for Output 4, and TF 5 for Output 5. Each TF consists of personnel from Thai and Japanese sides planned and implemented the planned activities.

Table 6 Outputs - progress

| Task Force | Expected Output   | Progress   |
|------------|---|--|
| 1          | DPM action plans with considerations for vulnerable people are formulated for national, provincial and local authorities (in the model provinces) by TF – Disaster Management Planning. | <ul style="list-style-type: none"> <li>• DPM plan at national level is developed (100%).</li> <li>• DPM action plan for flood and tsunami at national level is developed (100%).</li> <li>• DPM plans are developed at provincial level (100%).</li> <li>• DPM action plans are developed at provincial level (59 out of 76 achieved).</li> <li>• DPM action plans are prepared by the model areas (4 locations).</li> </ul> |
| 2          | Capacity of DDPM staff as facilitators on implementation of CBDRM is enhanced by TF – CBDRM.  | <ul style="list-style-type: none"> <li>• Workshops to train facilitators are in progress.</li> <li>• Training manuals and teaching materials were modified, and continuous updating/modification are in progress.</li> <li>• In 2011, CBDRM action plan for implementation was prepared by 76 provinces.</li> </ul>  |
| 3          | Training curriculum at DPMA is improved by TF – Disaster Management Training.   | <ul style="list-style-type: none"> <li>• Training curriculum was developed and updated.</li> <li>• TTX is introduced.</li> </ul>   |
| 4          | Based on the Natural disaster preparedness educational curriculum, schools have improved preparedness for disaster by TF – Disaster Education.  | <ul style="list-style-type: none"> <li>• Training on disaster education is in progress at regional level (ESAO).</li> <li>• Development of disaster education materials is in progress.</li> <li>• OBEC guidelines for disaster management and education in school are prepared and is to be printed.</li> <li>• Workshops were conducted 6 times.</li> <li>• Through 2 seminars, 141 schools and 426</li> </ul>             |

|   |  |  |
|---|--|--|
|   |  | <p>personnel (i.e., ESAO staff, school directors, teachers) were trained.</p> <ul style="list-style-type: none"> <li>Besides public schools, private schools and vocational training schools expressed their interests to introduce disaster education to their respective schools.</li> </ul> |
| 5 | <p>Knowledge at technical capacity of DDPM on hazard mapping, early warning system and design of structural measures are enhanced by TF – Flood Risk Management.</p> | <p>TF 5 is responsible to achieve Output 5. TF 5 commenced its activities in January 2012. Hence, the Team could not make any assessment in regard to TF5.</p>   |


In addition to the above mentioned progress of each TF, there are additional significant achievements made by each TF. Although positive progress was found in the Project, there is a room for improvement for realizing the outputs as highlighted below.

In TF 1, Disaster Prevention and Mitigation Policy Bureau is the main responsible body for preparation of the plans developed in the Project. In discussion with local authorities, the Project developed a template for DPM action plan. In the coming months, TTX is conducted at local level based on the developed action plan. As/when needed, the template is going to be modified. The Project can only demonstrate the process of preparation of action plan and TTX in model areas. Hence, it is important that the project members from Thai side to familiarize themselves with steps planned and demonstrated by the experts.

In TF 2, there are only two model provinces which directly the Project are proving inputs such as trainers when conducting workshops and training materials. When considered the needs for remaining provinces, it is critical that Disaster Prevention and Promotion Bureau continues its effort to introduce CBDRM to communities prone to natural disasters. Since Department of Local Administration (DOLA) is responsible for assistance to local authorities, collaboration between DDPM, the MOE and DOLA is vital. At local level, the said collaboration as well as collaboration with the MOE are in progress. At central level, more enhanced and organized collaboration mechanism may be sought to synergize the roles and responsibilities of DOLA at local level.

According to the monitoring survey<sup>4</sup> conducted by the Project in October 2011, community members who were subject for the survey felt *they gained new knowledge in preparedness*

<sup>4</sup> The monitoring survey was conducted in Chaichomphu and Mae Saleem in Lampang and Muangsampe in Lamphun, which are selected as the project target areas. The purpose of the survey was to assess and document the outcome of implementing CBDRM intervention in the target areas. The outcomes were intended to be utilized to

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*strategy, risk mapping and warning signal for flood.* In addition, village heads and village flood response team expressed *they are more confident in flood response since CBDRM has been introduced to their communities.*

In TF 3, disaster management training planned and implemented is integrated into on-going training program of DPMA. DPMA closely work with other departments such as Thai Meteorological Department (TMD), Royal Irrigation Department (RID) and Department of Health when conducting training since trainers on particular subject are dispatched from the said departments. At provincial level, DPMA collaborated with ESAO when conducting training related to disaster education. Upon request by other department and private firms, DPMA conducted trainings in regard to disaster prevention and mitigation. DDPM not only trained DDPM staff members but also staff members of local authorities. In regard to utilization of the output(s) of Phase 1, E-learning materials are not currently in use by DPMA.

In TF 4, OBEC is active in promoting disaster education at public school level. After the 2011 flood, OBEC used newspapers and radio to inform general public, schools and others to utilize disaster education materials developed by the MOE. According to the MOE, general public, private and vocational schools showed great interests in the materials. Hence, it is evident that needs to introduce disaster education to Materials on disaster education are available online. Currently, such materials are uploaded under OBEC website. To reach out to more school especially private schools, non-formal schools, vocational schools and all other educational institutes for mass dissemination of the materials to be revised under the Project, it is sought to utilize the framework of the MOE as a whole rather than OBEC regular channel of communications. Roles of project coordination committee in the MOE responsible for coordination within the MOE and with other departments in regard to disaster education are in place under the Project. However, there is a need for more synergy to utilize and maximize the tools and know-how developed in the Project by the existing coordination committee members.

ESAO plays a key role under the Project to roll out disaster education at school levels. The Project is strengthening the network between central and provincial levels as well as provincial and school levels.

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improve CBDRM approach and determine the impacts on the flood-affected community in terms of preparedness and emergency response. Design of the monitoring survey followed the design of baseline survey conducted in 2010 under the Project. The monitoring survey covered around 500 residents in the target areas. The data collection was conducted through household questionnaire, focus group discussion and individual interview (i.e., village head, community committee for disaster response). Source: Report – Monitoring Survey at Village Level Chaichomphu and Mae Salaem, Lampang and Muangsampee in Lamphun, Thailand (December 2011). Action Training Center Co., Ltd under the guidance of the Project.

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#### **4.2 Project Purpose**

**Project purpose:** Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, CBDRM and disaster education, collaborating with concerned agencies, provincial and local levels.

The Project has not yet achieved the project purpose, which is acceptable to the Team since the Project has two more years until project termination. According to the results of interviews conducted to the project members, RID, Department of Water Resources (DWR), TMD, and DOLA play important roles in order to scale up DPM action plans, CBDRM and disaster education at provincial and local levels. Similarly, local authorities at municipality level and below are important for DDPM and OBEC to carry out their activities related to disaster risk management in a systematic and sustainable manner.

#### **4.3 Overall Goal**

**Overall goal:** Implementation of disaster risk management activities is improved and scaled up.

Within the project framework, the experts are providing technical guidance to Thai side to establish improved and sustainable disaster risk management structure. Although the Thai Cabinet is under discussion and preparation of new structure for flood management, DDPM is expected to be a key department.

As long as the Thai Government will not make drastic changes to the existing Plan and Act on national disaster prevention and mitigation in the coming years, the project outputs are going to contribute to implementation of disaster risk management activities at large scale by DDPM even after the project termination. However, the following conditions will have to be met for achievement of the overall goal:

- Adequate funding and qualified staff members are allocated to DDPM
- All concerned ministries/departments/bureaus/local authorities cooperate with DDPM

#### **4.4 Crosscutting implementation process**

##### **(1) Monitoring and decision making**

Monitoring activities are part of the project plan. Each TF is conducting monitoring to assess progress of the activities. Reports and meetings are held with each task and among task force periodically.

Decisions are made in consultation with the JCC and JICA as needed. JCC meeting is held at

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least once a year. The followings are the main functions of JCC:

- To formulate the annual work plan of the Project
- To review the progress of the work plan of the Project
- To review and exchange opinions on major issues that may arise during the project implementation

After the project commenced, Director of Research and International Cooperation Bureau, MOE, as vice chairperson, was added to the JCC. Representative(s) of Office of Women's Affair and Family Development, Ministry of Social Development and Human Security, as member(s), is also added to the JCC as shown in Table 7.

Table 7 List of JCC members

| No. | Position                          | M/M (October 2009)                                     | Actual (January 2012)   |
|-----|-----------------------------------|--|---|
| 1   | Chairperson<br>(Project Director) | Director-General, DDPM                                 | No change   |
| 2   | Vice Chairperson                  | Deputy Director-General, DDPM                          | No change   |
| 3   | Advisor of<br>Committee           | Deputy Permanent Secretary, MOE                        | No change   |
| 4   | Vice Chairperson                  | -  | Director, Bureau of International<br>Cooperation, MOE   |
| 5   | Secretary                         | Director, RICB, DDPM                                   | No change   |
| 6   | Member                            | Director, DPMPB, DDPM                                  | No change   |
| 7   | Member                            | Director, DPPB, DDPM                                   | No change   |
| 8   | Member                            | Director, DPMA   | No change   |
| 9   | Member                            | Representative, MOE                                    | Director, Bureau of Academic<br>Affairs and Education Standards,<br>OBEC, MOE                             |
| 10  | Member                            | Specialist, BIC MOE                                    | No change   |
| 11  | Members                           | Representative(s), Department of<br>Mineral Resources  | Director,<br>Environment Geology Division<br>Director, Active Fault Research<br>Division                  |
| 12  | Members                           | Representative(s), DOLA                                | Director, Bureau of Local<br>Administration Development<br>Director, Monitoring and Evaluation<br>Section |
| 13  | Members                           | Representative(s), National Disaster<br>Warning Center | Director, Warning System<br>Administration<br>Director, Warning and<br>Dissemination Section              |
| 14  | Members                           | Representative(s), RID                                 | Director, Office of Hydrology and<br>Water Management   |

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|    |           |   |   |
|----|-----------|---|---|
|    |           |   | Professional Engineering of Operation and Maintenance   |
| 15 | Members   | Representative(s), TMD  | Director, Weather Forecast Bureau<br>Director, Central Weather Forecast Division  |
| 16 | Member(s) | Representative(s), DWR  | Acting Chief,<br>Water Operation Center   |
| 17 | Member(s) | Representative(s), target provinces (Demonstration and Replication)   | Director, Bureau of Gender Equality Promotion, Office of Women's Affair and Family Development, Ministry of Social Development and Human Security |
| 18 | Member    | Representative, Thai International Cooperation Agency   | Director, Countries Partnership Bureau (Bilateral and Trilateral)   |
| 19 | Member    | Personnel assigned by the Chairperson, if necessary   | No change   |
| 20 | Members   | Experts   | No change   |
| 21 | Member    | Chief Representative, JICA Thailand Office  | Representative,<br>JICA Thailand Office   |
| 22 | Member    | Personnel assigned by JICA, if necessary. Official(s) of the Embassy of Japan may attend the JCC session(s) as observer(s). | No change   |

\*RICB is the JCC secretariat.

## (2) Communication

RICB in DDPM act as project secretariat, so communication among project members and to the JCC members and others concerned is managed by RICB. Hence, inter-bureau coordination was promoted through this communication mechanism established under the Project, especially within DDPM.

Inter-TF meetings are periodically conducted for sharing of progress and information concerning to the Project. Email, phone, fax and letters are commonly used besides meetings to secure smooth and timely communication among the project members and with others concerned.

According to the experts and the project members from Thai side, there were no major problems regarding communication in the Project. In regard to communication between DDPM and OBEC, there is a room for improvement especially for coordination of facilitators dispatch when disaster education is conducted by OBEC side.

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*Chief SSM*  
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## 5. Evaluation results

### 5.1 Relevance

The relevance of the Project is high since the project objectives not only remain consistent with the development policy but also are in line with needs of the Thai Government. Similarly, the Project is consistent with the assistance policy of the Japanese Government including JICA for Thailand at the time of mid-term review.

According to the summary of the Direction of the Eleventh National Development Plan (2012-2016), the framework of the Plan is designed to give focus on people-centered development and promote participatory approaches towards balanced, integrated and holistic development. In the Plan, there are three missions. One of them is to strengthen resilience to changes and crises and development of human resources. There are 7 key targets in the Plan; 1) peace and good governance, 2) social protection, 3) increase in productivity, 4) increase in agricultural and service sectors, 5) increase in creative economy, 6) improvement in competitiveness, and 7) improvement in natural resources and environmental quality. Disaster risk management is a cross cutting issue which affects the 7 targets shown above.

The Disaster Prevention and Mitigation Act B.E. 2550 (2007) prescribed DDPM be in charge of formulating National Disaster Prevention and Mitigation Plan<sup>5</sup>. The Cabinet in Thailand approved the National Disaster Prevention and Mitigation Plan B.E. 2553-2557 (2010-2014) in November 2009. The Plan aims to minimize disaster risks and losses of lives and properties of the people and the country by providing framework and guidelines in implementing disaster management activities in a systematic and integrated manner: to be well-prepared in all aspects to cope with disaster risks through continuous and effective capacity development. In the Plan, disaster severity scale is classified into four levels as shown in Table 8.

Table 8 Compatibility between disaster severity scale and level of person(s) in charge

| Level | Scale  | Person in Charge of Management   |
|-------|--|--|
| 1     | Small  | Local Director, District Director, and/or Bangkok Director Assistant   |
| 2     | Medium   | Director, Provincial Director, and/or Bangkok Metropolitan Director, if disaster situation is beyond capacity of the above mentioned person(s) |
| 3     | Large, with severe and widespread impact or required specialist or | Director, Central Director, and/or National Commander, if disaster situation is beyond capacity of   |

<sup>5</sup> Disaster in the Plan refers to flood and landslide, tropical cyclone, fire, chemical and hazardous materials, transport hazard, drought, cold spell, forest fire and haze, earthquake and building collapse, tsunami, human epidemic, plant disease and pest, animal and aquatic animal epidemic, and information technology threat.

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|   |                                  |   |
|---|----------------------------------|---|
|   | specific equipment               | the second level                            |
| 4 | Large – with catastrophic impact | The Prime Minister or Deputy Prime Minister |

According to Japan's Economic Cooperation Program for Thailand, which was prepared by the Government of Japan in 2006, there are two areas of cooperation. One is bilateral cooperation<sup>6</sup> between Thailand and Japan, and the other is joint assistance to a third country. In the Program, it is said that there are many measures to be taken in order to build a society in which everyone can lead life safety with dignity. In principle, technical cooperation scheme will cover global issues such as natural disasters, which affect not only Thailand but also countries nearby. JICA is responsible for planning, implementing and managing technical cooperation between Thailand and Japan. JICA's assistance strategy for Thailand in the field of natural disaster management, priorities are given to the following components:

- Establishment of disaster prevention structure/mechanism at central and local authority levels, including collaboration between central and decentralized levels
- Enhancement of capacity in regard to countermeasures against disaster at community level.

In Japan, the governmental organizations at central and local levels have been preparing for disaster for a long time. Similarly, there are numerous efforts made at community level for disaster preparedness. Knowledge, experience and know-how on disaster management developed in Japan are relevant and transferable to countries including Thailand. In addition, Japan has appropriate human resources in the field of disaster management to assist the Thai Government to further develop capacity of government officers and communities.

## 5.2 Effectiveness (Prospects)

The effectiveness of the Project is going to be relatively high since the project purpose is expected to be achieved by the end of project period. However, there is a room for improvement especially the relationship between DDPM and the MOE at the central level. Similarly, collaboration mechanism between DDPM and DOLA may be institutionalized to involve local administration as facilitators and financial support for CBDRM implementation at nation-wide.

The Project is implementing the planned activities as per the Plan of Operation (PO). Despite the 2011 flood hit Thailand, especially nearby Bangkok area, the Project continued to

<sup>6</sup> Under bilateral cooperation scheme, projects with the following approaches are planned and implemented: technical cooperation, yen loan, and grant assistance for grassroots human security projects, Japanese NGO projects as well as grassroots technical cooperation.

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implement the planned activities. Furthermore, the Project in coordination with JICA extended assistance to reduce risk of further damages. For example, sand bags were donated to the Thai Government. The project members from concerned bureaus and individual levels from both Thai and Japanese sides supported the emergency operation during the flood. Although the National DPM Plan was not applied at the time of 2011 flood, lessons learned from each TF from view point of their involvements and roles played can be withdrawn. Such lessons learned will be a great asset to enhance capacity of DDPM and the MOE.

JCC is meeting regularly to ensure effective project implementation. Key departments such as RID, TDM, DWR are the JCC members. During the mid-term review, these departments assured to support DDPM throughout the project period.

There was no problem in regard to dispatch of experts as well as equipment procurement from Japanese side. Counterpart training in Japan was conducted as planned. Participants of the training in Japan gave the following feedback to the Team:

- The content of training course (both disaster management and disaster education) was relevant.
- Seeing actual events and activities in Japan was an eye opener. There is more encouragement and motivation to institutionalize DRM and CBDRM in Thailand.
- "Sense of Team" among participants was developed through the training course.

There was no major problem in terms of assignment of project members from Thai side, although there was some unclarity to exact members of each task force at the beginning of the project implementation. There were some changes made to the project members from Thai side during the project implementation. Some changes of the project members cannot be avoided, but can be a negative factor for effective project implementation because of the following reasons:

- Additional unplanned time is spent to train newly joined members.
- Relationship among project members between Japanese and Thai side gets weakened.
- Thai personnel are not adequately utilizing knowledge and skills developed under the Project, and also not utilizing and applying the enhanced knowledge and skills to implement the Project.

### 5.3 Efficiency

The achievement levels of the outputs are relatively high since TF 1 to 4 have made substantial progress. As for TF 5, it is too early to make an assessment since it was added to the Project at

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the end of 2011 and commenced its operation in January 2012.

The inputs from Japanese side have been provided as stated in the R/D. From view point of Thai side, there is no major concern in regard to the inputs provided by Japanese side. According to the project members, knowledge and experience transferred from Japanese side to Thai side have been appropriate and useful. Similarly, training in Japan was “an eye opener” to Thai side. Participants of training in Japan commented that how disaster management at school and community levels is introduced and operationalized in Japan is not only encouraging but also convincing as an effective way to reduce losses of lives and properties due to natural disasters. One Philippine national expert who has extensive experiences on CBDRM including working experience at Asian Disaster Preparedness Center and in other developing countries is an important asset to the Project. She was involved in Phase 1 of the Project. Hence, she also played a linkage role between Phase 1 and Phase 2.

The inputs from Thai side have been provided to the Project as planned for the most part. After the 2011 flood occurred in Thailand, the Thai Government had to give the highest priority for relief and recovery activities. Hence, some of funds which were allocated for the project implementation had to be reallocated to such relief activities, although exact amount is not certain according to the project members. Due to the 2011 flood, budget which DDPM received from the Central Government was less compared to 2010. In some cases, Thai side had to request the Project to cover expenses of Thai side during the project implementation.

The Project is involving local authorities to promote disaster management and disaster education at local level. If local administration agrees to support disaster management and disaster education at local level from financial and technical aspects, the Project will be able to disseminate CBDRM and disaster education in a faster manner.

#### **5.4 Impact (Prospects)**

The Project has two more years to build a firm foundation to improve and scale up the existing implementation mechanism of disaster risk management activities. Although it may be too early to assess the project impact at the time of mid-term review, there are some indicators that contribute to achievement of the overall goal of the Project:

- Disaster management planning: Necessary planning was done at national and provincial levels. Action plan at local level is introduced under the Project. It is expected that action plan development at local level will be promoted and prepared under the strong leadership of DDPM in the coming months.

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*Chief SDR*

- **CBDRM:** community members in the model areas can be good resource persons to expand CBDRM in areas other than the target areas. DDPM is expected to mobilize local authorities and other relevant organizations such as Thai Red Cross to introduce CBDRM to all communities prone to natural disasters.
- **Disaster education:** The MOE is coordinating with DDPM province offices when disaster education is given to school teachers and at schools. Officers from DDPM province offices act as trainers and facilitators, so that appropriate information related to disaster preparedness and management is disseminated to schools.

One of the major concerns which the Team identified was funding availability from Thai side. Before project termination, the Project should review and modify the exit strategy with a special attention given to the following aspects:

- Actual availability of budget from central to provinces to implement CBDRM at all disaster prone communities
- Command system during disaster from central level to community level
- Role and responsibility of concerned departments for disaster risk reduction and management

### **5.5 Sustainability (Prospects)**

Sustainability was assessed with view point of the following aspects: (1) organizational and policy aspects, (2) technical aspect, and (3) financial aspect. Based on the assessment below, sustainability of the Project is going to be fair at the time of mid-term review.

#### **(1) Organizational and policy aspects**

Disaster Prevention and Mitigation Act, which came into force in 2007 in Thailand, remains valid at the time of mid-term review. As stated in Section 11 of the Act, DDPM is the central state agency responsible in performing the tasks on disaster prevention and mitigation operation in Thailand.

In terms of the organizational structure of DDPM, there is adequate man power to carry out preparedness activities according to funding available for such activities. Both central and decentralized offices under DDPM are highly committed to reduce natural disaster risks throughout the country.

In regard to sustainable promotion of disaster education, the MOE developed necessary plan/policy to introduce disaster education in accordance with the national development plans.

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However, implementation structure needs further enhancement of which can be realized with strong leadership of the MOE, involvement of other offices responsible for private schools, vocational training institutes and other educational institutions, and placement of additional staff members at the central level.

DDPM and MOE are in discussion with Office of the National Economic and Social Development Board (NESDB) to mainstream disaster prevention and mitigation in strategies/policies of the Thai Government. For example, the Project aims to incorporate disaster education into regular school curriculum at primary and junior high school levels.

Hence, sustainability of the Project from organization and policy aspects is going to be high.

#### (2) Technical aspect

According to the counterparts as well as the experts, capacity of counterparts is enhanced owing to the project implementation. Similarly, they believe that levels of their technical expertise are being enhanced, although there are some rooms for improvement and update. In particular to flood risk management, DDPM staff members will require further study for better understanding. Hence, sustainability of the Project from technical aspect is going to be fair.

#### (3) Financial aspect

The Team could not obtain documents related to recent DDPM annual budgets to better understand trend of budget allocated from the Central Government to DDPM each year. Similarly, financial information from the MOE was not available to the Team. Financial information such as department-level budget information can indicate financial sustainability of the Project.

Based on the interviews to the counterparts, the Team understood that the Thai Government will make efforts to allocate adequate funding for further implementation of activities initiated under the Project even after the project termination. In particular to DDPM, they expressed that additional funding support from the Central Government is needed for better disaster preparedness. Although it is difficult to foresee sustainability of the Project from financial view point without clear evidence, the Team assessed that it may be low at the time of mid-term review particularly because funding requirements for recovery phase of the 2011 Flood is enormous with the Thai Government. Hence, the Team predicts that more funding is going to be allocated for response activities such as compensation payment to affected families rather than preparedness and prevention activities in DDPM. However, it is essential that the Thai

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Government allocate adequate funds to preparedness and prevention activities carried out by DDPM at the time of recovery phase from the 2011 flood when assessing the long-term effects of human and economic loss in Thailand.

## **6. Conclusion**

Based on the results of 5 evaluation criterias as shown below, the Team assessed the achievement level of the project purpose is high, although sustainability of the Project is relatively high excluding sustainability from financial aspect. The followings are the results of the criteria:

- Relevance of the Project was high.
- Effectiveness and efficiency of the Project were relatively high.
- Several positive impacts are found although there are a few hindering factors for achieving the overall goal after project termination.
- Sustainability of the Project is relatively high.

## **7. Recommendations**

- (1) Importance of utilizing the outputs from Phase 1: One of the outputs from Phase 1 is disaster education E-learning materials. Similarly, there is a coordination structure among concerned departments/bureaus when developing the White Paper during Phase 1. These achievements are sought to be utilized under the Project.
- (2) Significance of collaboration with DOLA for CBDRM implementation: Enhanced understanding of DPM by local authorities is needed. Hence, it is recommended to explore possibilities of signing Memorandum of Understanding between DDPM and DOLA for effective implementation of CBDRM with adequate funding allocation to create safety culture for disaster prevention at local level.
- (3) Importance of promoting effective partnership between DDPM and other concerned organizations: Collaboration between DDPM at provincial level and ESAO, and with TMD, RID, Police Academy, Department of Health and others concerned are made and recognized as an effective approach. DDPM at central level is providing its staff members as trainers to DPMA and the MOE. Similarly, DDPM give guidance to provincial, local authority and community levels for development of DPM action plan(s). It is expected that DDPM and the MOE not only continue to maintain but also strengthen the established partnerships with other concerned departments.

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(4) Development of inventory list(s) for monitoring: Development of inventory list(s) to record status of progress in development of DPM action plan, CBDRM and disaster education is needed for monitoring of achievement of the Project. The proposed list will be useful for explaining the project progress and rolling out of the above mentioned activities nationwide.

(5) Approaches for achievement of the overall goal of the Project:

- Project coordination role played by RICB in DDPM is critical to ensure smooth project implementation and coordination among TFs. It is suggested that each bureau proactively communicate with other bureau for effective implementation of activities related to disaster risk management.
- It is expected that DDPM proactively find ways to secure adequate number of personnel and budget in order to achieve the overall goal within the Ministry of Interior even before project termination.
- It is recommended that the MOE to disseminate and the project outputs to offices outside OBEC and maximize the inputs provided during the project implementation and the project's outputs.
- Some of the activities conducted by the MOE were consistent with the National Development Plans for the Thai Government, which were prepared by NESDB. It is important to synergize activities of the MOE with strategies planned by NESDB to achieve the overall goal.

(6) Collaboration with schools to promote CBDRM: It is suggested that DDPM collaborate with schools to promote CBDRM. Schools normally perform many functions at community level, so that roles of schools may be incorporated into DPM plan(s).

(7) Importance of reflecting lessons learned from the 2011 flood: Each TF is expected to study the actions/activities taken during the 2011 flood and incorporate lessons learned from the study into the tasks given under the Project.

## 8. Lessons learned

Promptness in decision-making and reflection of lessons learned by joint project implementation with counterpart at central, province and community levels:

(1) DDPM

DDPM mobilize its own staff at central, regional, province levels as well as local au

communities to promote disaster prevention and mitigation. For example, preparation of template of DPM action plans and revision of CBDPM manual and facilitator's guide were realized with joint efforts of staff members from the central level to community level. Similarly, network established within DDPM and with local authorities became a useful channel for capturing local needs into policies at central level.

## (2) MOE

One of the TFs in the Project, which focuses on disaster education, carried out activities at central, provincial and community levels simultaneously. Items which were subject for modification/improvement were identified during the project implementation in way of curriculum modification and securing budget. Furthermore, disaster education seminar, which is held once a year at national level by inviting ESAO directors, school directors and teachers of public schools from all over the countries to share good practices, is an effectiveness event for network-building.

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**Evaluation Grid**

| Item                 | Evaluation Question   |  | Source of Information  |
|----------------------|---|--|--|
|                      | Main Question   | Sub-Question   |  |
| <b>Relevancy</b>     | Relevance of priority/needs   | Consistent with national strategy/plan/policy of the Thai Government   | <ul style="list-style-type: none"> <li>• National plan(s) of Thailand</li> <li>• Strategic National Action Plan for Disaster Risk Reduction 2010-2019</li> <li>• Policy document(s) and plan(s) related to disaster education prepared by MOI</li> <li>• Policy document(s) and plan(s) related to disaster education prepared by MOE</li> <li>• Interview to JCC members</li> </ul> |
|                      |   | Consistent with needs of project implementation organization   | Interview to project members from Thai side  |
|                      | Commitment of Thai side   | Commitment level from the Thai side high for successful project implementation   | <ul style="list-style-type: none"> <li>• Interview to JICA Thai Office</li> <li>• Project preliminary study report</li> <li>• Project progress report(s)</li> </ul>  |
|                      | Relevance to the Japanese ODA policy  | Consistency with assistance policy of Japan for Thailand   | MOFA and JICA strategy/policy documents related to Thailand  |
|                      | Relationship with other development partner(s)  | Comparability/synergy with other development partner(s) in the field of disaster management  | Interview to project members from Thai side  |
|                      | Advantage of Japanese technology  | Do the Japanese experience, technology, techniques have the comparative advantage?   | Project preliminary study report   |
| <b>Effectiveness</b> | Prospect of achieving the project purpose   | What is the possibility of achieving the project purpose by the end of the Project?  | <ul style="list-style-type: none"> <li>• Project progress report(s)</li> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>   |
|                      | Adequacy of cause/effect of the project purpose, outputs and external factors/important assumption(s) | Achievement level of the project purpose in relation to achievement level of the expected outputs and external factor(s)/important assumption(s) | <ul style="list-style-type: none"> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> <li>• Assessment by mid-term review team</li> </ul>   |
|                      |   | External factor(s)/ important assumption(s)  | <ul style="list-style-type: none"> <li>• Project progress report(s)</li> <li>• Questionnaire</li> </ul>  |
|                      | Project management structure  | Were the monitoring structure /points, decision making structure, communications adequate/appropriate?   | <ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>  |
|                      | Factor(s) might affected the achievement of the project purpose                                       | Were there any promoting factors for achieving the project purpose?  | <ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>  |


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| Item       | Evaluation Question  |  | Source of Information  |
|------------|--|--|--|
|            | Main Question  | Sub-Question   |  |
|            |  | Were there any hindering factors for achieving the project purpose?  | <ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>                              |
| Efficiency | Achievement level of Outputs   | Were the expected outputs realized as planned?   | <ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>                              |
|            |  | Was each output contributing to achieve outcome(s) of the Project?   | <ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>                              |
|            | Timing of implementation of project activities and placement of inputs | Dispatch of Japanese experts   | <ul style="list-style-type: none"> <li>• Project progress report(s)</li> <li>• Questionnaire</li> </ul>  |
|            |  | Allocation of project members from Thai side   | <ul style="list-style-type: none"> <li>• Project progress report(s)</li> <li>• Questionnaire</li> </ul>  |
|            |  |  | <ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview to JICA Thai Office</li> </ul>   |
|            | Appropriateness of quantity, quality, and time of inputs               | Experts, project members from Thai side (Counterpart)  | <ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>                              |
|            |  | Equipment  | <ul style="list-style-type: none"> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>   |
|            |  | Training in Japan  | <ul style="list-style-type: none"> <li>• Project progress report</li> <li>• Interview to participants of training in Japan</li> </ul>  |
|            | Contributing and/or hindering factor(s) to increase efficiency         | Were there any contributing factor(s) to increase the project efficiency?  | <ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>                              |
|            |  | Were there any hindering factor(s) to increase the project efficiency?   | <ul style="list-style-type: none"> <li>• Questionnaire</li> <li>• Interview to Japanese experts</li> <li>• Interview to project members from Thai side</li> </ul>                              |
|            | Collaboration with other ODA project                                   | Were there any collaboration/coordination with other JICA project(s), assistance of the Japanese Government, and/or other development partner(s) in the same or similar field? | <ul style="list-style-type: none"> <li>• Interview to Japanese Experts</li> <li>• Interview to project members from Thai side</li> <li>• Interview to any other concerned person(s)</li> </ul> |
| Impact     | Prospects of achieving the overall goal in 3-5 years after project     | Prospects of achieving the overall goal  | <ul style="list-style-type: none"> <li>• Interview to project members from Thai side</li> <li>• Responses to the questionnaire</li> </ul>  |

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| Item           | Evaluation Question               |   | Source of Information   |
|----------------|-----------------------------------|---|---|
|                | Main Question                     | Sub-Question  |   |
|                | termination                       | External factors/ Important assumptions   | <ul style="list-style-type: none"> <li>• Interview to project members from Thai side</li> <li>• Responses to the questionnaire</li> </ul> |
| Sustainability | Organizational and policy aspects | Are the policies/act(s)/system(s) to sustain the project effects adequately in effect/place?                                  | <ul style="list-style-type: none"> <li>• Interview to project members from Thai side</li> <li>• Questionnaire</li> </ul>                  |
|                | Human resource aspect             | Is it like that that the Thai side will allocate adequate person(s) to sustain the project effects after project termination? | <ul style="list-style-type: none"> <li>• Interview to project members from Thai side</li> <li>• Questionnaire</li> </ul>                  |
|                | Financial aspect                  | Is it likely that the Thai side will allocate adequate funds to sustain the project effects after the project termination?    | <ul style="list-style-type: none"> <li>• Interview to project members from Thai side</li> <li>• Questionnaire</li> </ul>                  |
|                | Technical aspect                  | Is the technology/technique(s) required for the Thai side to sustain the project effects by itself adequately developed?      | <ul style="list-style-type: none"> <li>• Interview to project members from Thai side</li> <li>• Questionnaire</li> </ul>                  |

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## Schedule of Intermediate Evaluation of PCDDM-2

| month | date    | day | Time        | Evaluation Analysis  | Ms. Mitani | Ms. Tanaka      | Mr. Nakasone | Project Activities               |
|-------|---------|-----|-------------|--|------------|-----------------|--------------|----------------------------------|
| 1     | Feb. 6  | Mon |             | Arrival to BKK   |            |                 |              |                                  |
| 2     | Feb. 7  | Tue | 10:00-11:00 | visit JICA Thailand  |            |                 |              | Inter-TF meeting                 |
|       |         |     | 14:00-16:00 | Department of Water Resources (DWR)                          |            |                 |              |                                  |
| 3     | Feb. 8  | Wed | 10:00-12:00 | Royal Irrigation Department (RID)                            |            |                 |              |                                  |
|       |         |     | 13:00-15:00 | Department of Mineral Resources (DMR)                        |            |                 |              |                                  |
| 4     | Feb. 9  | Thu | 10:00-12:00 | Evaluation Reporting   |            |                 |              |                                  |
|       |         |     | 13:00-15:00 | Thai Meteorological Department (TMD)                         |            |                 |              |                                  |
| 5     | Feb. 10 | Fri | 9:00-10:30  | Interview to TF-5 (Flood Risk Management)                    |            |                 |              |                                  |
|       |         |     | 14:00-16:00 | Interview to TF-2 (CBDRM)                                    |            |                 |              |                                  |
| 6     | Feb. 11 | Sat |             | Evaluation Reporting   |            |                 |              |                                  |
| 7     | Feb. 12 | Sun |             | Evaluation Reporting   |            |                 |              |                                  |
| 8     | Feb. 13 | Mon | 10:00-12:00 | Interview to RICB, DDPM                                      |            |                 |              |                                  |
|       |         |     | PM          | Interview to JICA Experts                                    |            | Attri./ meeting |              |                                  |
|       |         |     | 09:00-10:00 | Interview to TF-3 (Disaster Management Training)             |            |                 |              |                                  |
| 9     | Feb. 14 | Tue | 10:00-12:00 | Interview to TF-1 (Disaster Management Planning)             |            |                 |              |                                  |
|       |         |     | 14:00-15:30 | Interview to Red Cross                                       |            |                 |              |                                  |
|       |         |     | 16:00-18:00 | Interview to JICA Experts                                    |            |                 |              |                                  |
|       |         |     | 09:00-12:00 | Interview to TF-4 (Disaster Education) MOE/Experts           |            |                 |              |                                  |
| 10    | Feb. 15 | Wed | 14:00-15:00 | Interview to TICA  |            |                 |              |                                  |
|       |         |     |             | Travel by TG116 Bangkok (17.25) - Chiang Mai (18.35)         |            |                 |              |                                  |
|       |         |     |             | Travel by by mini van (Chiang Mai (18.45) - Lampang (20.00)) |            |                 |              |                                  |
|       |         |     | 08:30-09:30 | Attend the Seminar   |            |                 |              |                                  |
|       |         |     | 09:30-10:30 | Interview to DPM Lamphun Province                            |            |                 |              |                                  |
|       |         |     | 11:00-12:00 | Interview to Vice director of Lampang Province               |            |                 |              |                                  |
| 11    | Feb. 16 | Thu | 13:00-14:30 | Interview to DPM Regional Center 10 (Mr. Anusorn)            |            |                 |              | Training of Local Authorities in |

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|----|------|-----|-------------|--|-------------------------------|
|    |      |     | 15:00-16:00 | Interview to DPM Lamphun Province  | Lampang                       |
|    |      |     | 16:00-17:30 | Interview to village headman of Ban Muong Sam Pee (Lamphun)  |                               |
| 12 | Feb. | 17  | 10:00-12:00 | Interview to ESACO Lamphun (Mr. Sombat Sutthipommaneeawat) with Maehang Wittaya School (Mr. Wirayut Khuanthit) |                               |
|    |      | Fri | 13:00-14:30 | Interview to village headman of Ban Chai Chom Phu (Lampang)  |                               |
|    |      |     | 14:30-15:30 | Visit school which will be the disaster information center   |                               |
|    |      |     |             | Travel by a rental car (Lampang (08.00) - Chiang Mai (10.30))  |                               |
| 13 | Feb. | 18  |             | Travel by TG105 (Chiang Mai (11.30) - Bangkok (12.50))   |                               |
|    |      | Sat | PM          | Evaluation Reporting   |                               |
| 14 | Feb. | 19  |             | Evaluation Reporting/ meeting with evaluation team   | Arri./ meeting                |
| 15 | Feb. | 20  | 10:00-12:00 | Discussion with C/P modify the report  |                               |
|    |      | Mon | 13:00-16:00 | Discussion with JICA experts modify the report   |                               |
| 16 | Feb. | 21  | 10:00-12:00 | Explanation of the results of evaluation to C/P  |                               |
|    |      | Tue | 14:00-16:00 | Presentation of Baseline survey  |                               |
| 17 | Feb. | 22  | 10:00-12:00 | Discussion with C/P modify the report  | CBDRM in Lamphun              |
|    |      | Wed | 13:00-14:00 | Interview to Mr. Eric (UNDP)   |                               |
|    |      |     | 14:30-17:30 | Evaluation Reporting   | Observation of affected areas |
| 18 | Feb. | 23  | 10:00-12:00 | JCC and conclusion of MM   |                               |
|    |      | Thu |             | Travel by JL718 (BKK 23:15 - TKY 07:05)  |                               |
| 19 | Feb. | 24  |             | (Dept.23th night) Arrival to Tokyo   | Another Project               |
| 20 | Feb. | 25  |             | -  | (Dept. to Jakarta)            |

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**Annex 3**

**Project Design Matrix (PDM)**

**Project Title:** The Project on Capacity Development in Disaster Management (Phase 2) Period: 2010 - 2014 (4 years)  
**Implementing Agency:** Department of Disaster Prevention and Mitigation (DDPM), Co-Implementing Agency: Ministry of Education (MOE)  
**Target Groups:** (direct) DDPM staff at central and provincial levels.

**Version 4**

(indirect) local authority's staff (municipality/sub-division administrative organization (SAO)) and community people in the model areas.  
**Target Provinces:** Lampang and Lamphun Provinces, additionally CBDRM and disaster education is conducted in Nakhon Si Thammarat and other provinces

| Narrative Summary  | Objectively Verifiable Indicators   | Means of Verification  | Important Assumptions  |
|--|---|--|--|
| <p><b>Overall Goal</b><br/> <b>(in 3-5 years after the Project ends):</b><br/>                     Implementation of disaster risk management activities is improved and scaled up.</p>  | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans are formulated in all 76 provinces and Bangkok Metropolitan Administration (BMA), and revised (if necessary).</li> <li>2. All 76 provinces and BMA conduct table-top exercise (TTX) at least one municipality/SAO (Tedsabaan/Ooborot) together with the province to verify the disaster prevention and mitigation action plan at local level.</li> <li>3. Evacuation plans are prepared by more than 100 communities every year (other than the Project model communities) with support of DPM Regional Centers and Provincial offices.</li> <li>4. Disaster education is implemented by at least four schools. Each school functions as a learning center at the initiative of ESA Office in four major regions in Thailand, respectively.</li> </ol> | <ol style="list-style-type: none"> <li>1. Provincial Disaster Prevention and Mitigation Plans and Action Plans</li> <li>2. Evaluation report of TTX</li> <li>3. Evacuation plans</li> <li>4. Record of workshop report(s)</li> </ol> |  |
| <p><b>Project Purpose (by the end of the Project)</b><br/>                     Capacity of DDPM is enhanced to scale up Disaster Prevention and Mitigation Action Plans, Community Based Disaster Risk Management: CBDRM and disaster education, collaborating with concerned agencies, provincial and local levels.</p> | <ol style="list-style-type: none"> <li>1. Plans for up-scaling are included in the National Disaster Prevention and Mitigation Action Plan.</li> <li>2. Plans for up-scaling within the provinces are included in the Provincial Disaster Prevention and Mitigation Action Plans of the model provinces.</li> </ol>   | Disaster Prevention and Mitigation Action Plans  | Mission and responsibility of DDPM regarding disaster management is maintained by law. |

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| <p><b>Outputs</b><br/> <b>&lt;Task Force - Disaster Management Planning&gt;</b><br/> 1. Disaster Prevention and Mitigation Action Plans with considerations for vulnerable people are formulated for national, provincial and local authorities (in the model provinces).</p> | <p>1. Disaster Prevention and Mitigation Action Plans are formulated at national, provincial (model provinces) and local levels (At least 80 local authorities or 80% in Lamphun and 45 local authorities or 80% in Lamphun).</p>  | <p>1. Disaster Prevention and Mitigation Action Plans at national, provincial and local levels</p>  |  |
| <p><b>&lt;Task force-CBDRM&gt;</b><br/> 2. Capacity of DDPM staff as facilitators on implementation of Community Based Disaster Risk Management (CBDRM) is enhanced.</p>  | <p>2-1 CBDRM manuals and facilitator's guide developed by the JICA Project Phase I (for facilitators and for communities) are improved and are utilized in the model communities.<br/> 2-2 Disaster training and educational materials (for facilitators and for communities) are improved and are utilized in the model communities.<br/> 2-3 CBDRM action plan for implementation is developed by DDPM.<br/> 2-4 Lessons learned are obtained from the baseline and monitoring surveys and utilized to improve the capacity of CBDRM facilitators.</p> | <p>2-1-1 CBDRM manuals and activity reports<br/> 2-1-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)<br/> 2-2-1 Educational materials<br/> 2-2-2 CBDRM Knowledge of facilitators and community people (confirmed by observation)<br/> 2-3 CBDRM implementation action plan and activity reports<br/> 2-4 Results of baseline and monitoring surveys</p> |  |
| <p><b>&lt;Task Force - Disaster Management Training&gt;</b><br/> 3. Training curriculum at DPMA is improved.</p>  | <p>3-1 At least one curriculum on disaster management on natural disaster (flood, flash flood and mud flow) for DDPM staff is improved.</p>  | <p>3-1 Curriculum</p>   |  |
| <p><b>&lt;Task Force - Disaster Education&gt;</b><br/> 4. Based on the Natural disaster preparedness educational curriculum, schools have improved preparedness for disaster.</p>   | <p>4-1 At least three schools in the model provinces implement disaster education on natural disasters as model schools supported by the MOE headquarters and the first model schools from Phase I.<br/> 4-2 100 teachers from natural disaster prone areas are trained on disaster education.</p>   | <p>4-1 Record of model schools observation of classes<br/> 4-2 Records of training, workshops and seminars (i.e., Number of participants, content of training, date, level of achievement, etc.)</p>  |  |
| <p><b>&lt;Task Force - Flood Risk Management&gt;</b><br/> 5. Knowledge and technical capacity of DDPM on hazard mapping, early warning</p>  | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping are developed.</p>  | <p>5-1 Manuals on rainfall / flood analysis and hazard mapping</p>  |  |

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| <p>system and design of structural measures are enhanced.</p>  | <p>5-2 Manuals on early warning system and structural measures for flood mitigation and prevention are developed.</p> <p>5-3 Training targeting on all of 18 DPM regional centers using the above manuals.</p>  | <p>5-2 Manuals on early warning system and structural measures.</p> <p>5-3 Record of training (number of regional centers participating in the trainings)</p>  | <p><b>Preconditions</b></p> <p>Human resources and budget necessary for the implementation of the Project are provided by the Thai side.</p> |
| <p><b>Activities</b></p> <p>0-0 DDPM, in consultation with the Japanese experts, selects model areas.</p> <ul style="list-style-type: none"> <li>➤ Model province A: Lampang</li> <li>➤ Model community a1: Ban Chai Chom Phu (Moo 10) and Ban Mac Salaem (Moo 6)</li> <li>➤ Model community a2: Ban Chawfa (Moo 5: Chawfa and Jokfa)</li> <li>➤ Model province B: Lamphun</li> <li>➤ Model community b1: Ban Muong Sam Pee (Moo 8)</li> <li>➤ Additional model community b2: Ban Koomong (Moo 2)</li> </ul> <p>➤ Additionally, TF-CBDRM selected Ban Thiam Talod (Moo 4) as a model community in Nakhon Si Thammarat Province.</p> <p>0-1 DDPM and MOE develop a master inventory list to monitor progress and achievement levels of activities such as development of DPM action plan in 76 province and Bangkok and implementation of CBDRM in all prone communities from DDPM, and disaster education in all schools from the MOE side.</p>  | <p><b>Inputs</b></p> <p>&lt;Thai side&gt;</p> <p>Counterparts</p> <ul style="list-style-type: none"> <li>Project Director</li> <li>Project Manager</li> <li>Task force members</li> <li>Administrative staff</li> </ul> <p>Project office and facilities at DDPM</p> <p>Working space at MOE</p> <p>Operational costs</p> | <p>&lt;Japanese Side&gt;</p> <p>Experts:</p> <ul style="list-style-type: none"> <li>Disaster Management Plan</li> <li>Disaster Management Institution</li> <li>Sediment Disaster Management</li> <li>Flood Management</li> <li>Community Based Disaster Risk Management</li> <li>Disaster Education</li> <li>Disaster Management Exercise</li> </ul> <p>Counterpart Training in Japan</p> <p>Operational costs</p> | <p><b>Preconditions</b></p> <p>Human resources and budget necessary for the implementation of the Project are provided by the Thai side.</p> |
| <p>&lt;TF Disaster Management Planning&gt;</p> <p>1-1 TF Disaster Management Planning designs capacity development plan on their activities and monitoring/ evaluation.</p> <p>1-2 TF conduct training for 300 DDPM staff at central, regional and provincial levels how to formulate disaster prevention and mitigation plans and action plans, focusing on priority items.</p> <p>1-3 DDPM staff at central and provincial levels review and/or develop provincial disaster prevention and mitigation plans, focusing on priority items, in consideration of vulnerable people for disasters, for the model provinces of Lampang and Lamphun.</p> <p>1-4 DDPM staff at central and provincial levels prepares national and provincial disaster prevention and mitigation action plans, and model local authorities in model provinces prepare local disaster prevention and mitigation action plans, focusing on priority items, in which method of up-scaling, staffing and budget planning are identified and incorporated in the model provinces of Lampang and Lamphun.</p> <p>1-5 TF conducts table-top exercises to revise disaster prevention and mitigation plans and action plans with concerned organizations.</p> | <p>&lt;Thai side&gt;</p> <p>Counterparts</p> <ul style="list-style-type: none"> <li>Project Director</li> <li>Project Manager</li> <li>Task force members</li> <li>Administrative staff</li> </ul> <p>Project office and facilities at DDPM</p> <p>Working space at MOE</p> <p>Operational costs</p>                      | <p>&lt;Japanese Side&gt;</p> <p>Experts:</p> <ul style="list-style-type: none"> <li>Disaster Management Plan</li> <li>Disaster Management Institution</li> <li>Sediment Disaster Management</li> <li>Flood Management</li> <li>Community Based Disaster Risk Management</li> <li>Disaster Education</li> <li>Disaster Management Exercise</li> </ul> <p>Counterpart Training in Japan</p> <p>Operational costs</p> | <p><b>Preconditions</b></p> <p>Human resources and budget necessary for the implementation of the Project are provided by the Thai side.</p> |

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|  | <p>1-6 TF and concerned provincial staff modify disaster prevention and mitigation plans and action plans, based on the experience of table top exercises.</p> <p>1-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p><b>&lt;TF CBDRM&gt;</b></p> <p>2-1 TF-CBDRM designs capacity development plan on TF-CBDRM activities and monitoring/evaluation.</p> <p>2-2 TF reviews and revises CBDRM manuals and facilitator's guide seeking comments from 76 provinces and tests them at the model communities and finalizes them for publication.</p> <p>2-3 TF conducts training for at least 80 DDPM staff at central, regional and provincial levels to facilitate CBDRM. TF conducts training for staff of local authorities in the model provinces to enhance the knowledge of CBDRM for at least 220 staffs (300 staffs in total).</p> <p>2-4 Trained DDPM provincial staff in Lampang Province facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at the model communities of Ban Chai Chom Phu (Moo 10) and Ban Mae Salaem (Moo 6) in collaboration with the local model school.</p> <p>2-5 Trained DDPM provincial staff in Lamphun Province facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at the model community of Ban Muong Sam Pee (Moo 8) in collaboration with the local model school.</p> <p>2-6 Trained DDPM provincial staff in Lampang Province facilitates CBDRM activities, including Disaster Prevention and Mitigation Action Plans for local authorities at the model community of Ban Chawfa (Moo 5; Chawfa and Jokfa) in collaboration with the local model school.</p> <p>2-7 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staff such as study tour, case study forum, seminars, and newsletters.</p> <p><b>&lt;TF Disaster Management Training&gt;</b></p> <p>3-1 TF-Disaster Management Training designs a capacity development plan for its activities and monitoring/evaluation.</p> <p>3-2 TF develops guidelines for evaluation and monitoring of training.</p> <p>3-3 TF conducts needs assessment for training in collaboration with other task forces.</p> |
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3-4 TF revises standard disaster management curriculum in DPMA training courses on flood, flash flood and mud flow.

3-5 TF, in collaboration with concerned organizations, develops training modules and materials to synchronize training curriculum on disaster management (flood, flash flood and mud flow), CBDRM.

3-6 TF, in collaboration with concerned organizations, train master trainers for DDPM staff.

3-7 Master trainers train 300 DDPM staff of disaster management on flood, flash flood and mud flow.

3-8 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.

<TF Disaster Education>

4-1 DDPM and the MOE discuss and agree on the roles of each agency to implement TF-disaster education activities.

4-2 TF in collaboration with OBEC develops model curriculum of disaster education in schools on flood, flash flood, mudflow, and Tsunami.

4-3 TF in collaboration with OBEC modifies textbooks and teachers' guide.

4-4 TF selects at least four model schools and ESAOs in northern, north-eastern, central, and southern part of Thailand for disaster education planning and implementation.

4-5 TF in collaboration with the MOE trains at least four model schools collaboration with ESAOs.

4-6 ESAOs that supervise model schools prepare disaster education strategic plan and curriculum design to enhance the outcome to other schools including private schools.

4-7 Model schools train at least 100 teachers how to teach disaster education at schools in cooperation with local communities, cooperation with local authorities and DPM offices.

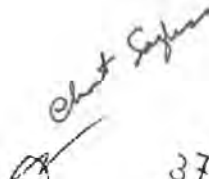
4-8 TF in collaboration with the MOE develops at least one master school as information center of disaster education.

4-9 TF in collaboration with OBEC reviews the process and revises curriculum.

4-10 TF proposes and DDPM institutionalizes up-scaling mechanism and establishes networks of sharing knowledge for all province staffs such as study tour, case study forum, seminars, and newsletters.

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|  | <p><b>&lt;TF Flood Risk Management&gt;</b><br/> 5-1 TF designs capacity development plan on its activities and monitoring/evaluation.<br/> 5-2 TF selects one sub-basin model site in Lampang or Lamphun province based on GIS base risk area maps which are being prepared by DDPM.<br/> 5-3 TF prepares manuals for rainfall / flood analysis and hazard mapping through the process of the practical training taking the model site as an example.<br/> 5-4 TF prepares manuals for improvement of early warning system and for evaluation of structural measures, in which the result of 5-3 will be functionally utilized.<br/> 5-5 TF conducts training on hazard mapping, early warning system and structural measures targeting DPM regional centers using the above manuals.</p> |
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| Name                  | field   | dispatched period     | occupation                    |
|-----------------------|---|-----------------------|-------------------------------|
| 1st period            |   |                       |                               |
| Mr. Machara Noritoshi | Team leader / Disaster management institution | 2010/06/07-2010/09/04 | IDEA Consultants, Inc.        |
| Mr. Maehara Noritoshi | Team leader / Disaster management institution | 2010/09/27-2010/11/25 | IDEA Consultants, Inc.        |
| Mr. Machara Noritoshi | Team leader / Disaster management institution | 2010/12/16-2011/03/15 | IDEA Consultants, Inc.        |
| Mr. Jitsuhiro Noboru  | Sub-team leader / Disaster management plan    | 2010/06/07-2010/08/05 | IDEA Consultants, Inc.        |
| Mr. Jitsuhiro Noboru  | Sub-team leader / Disaster management plan    | 2010/11/21-2010/12/20 | IDEA Consultants, Inc.        |
| Mr. Jitsuhiro Noboru  | Sub-team leader / Disaster management plan    | 2011/01/30-2011/03/15 | IDEA Consultants, Inc.        |
| Mr. Koike Toru        | Sediment disaster management                  | 2010/11/09-2011/01/07 | Earth System Science, Co.Ltd. |
| Mr. Kodama Makoto     | Flood management                              | 2010/07/05-2010/09/02 | IDEA Consultants, Inc.        |
| Mr. Sasaki Arata      | Community based disaster risk management      | 2010/07/05-2010/08/18 | Earth System Science, Co.Ltd. |
| Mr. Sasaki Arata      | Community based disaster risk management      | 2010/10/11-2010/12/24 | Earth System Science, Co.Ltd. |
| Mr. Onodera Jun       | Disaster Education                            | 2010/08/08-2010/11/05 | Earth System Science, Co.Ltd. |
| Mr. Kodama Makoto     | Coordinator                                   | 2010/06/07-2010/06/26 | IDEA Consultants, Inc.        |
| Mr. Kodama Makoto     | Coordinator                                   | 2011/01/31-2011/03/11 | IDEA Consultants, Inc.        |
| 2nd period            |   |                       |                               |
| Mr. Maehara Noritoshi | Team leader / Disaster management institution | 2011/05/05-2011/07/06 | IDEA Consultants, Inc.        |
| Mr. Maehara Noritoshi | Team leader / Disaster management institution | 2011/08/14-2011/09/13 | IDEA Consultants, Inc.        |
| Mr. Maehara Noritoshi | Team leader / Disaster management institution | 2011/09/29-2011/10/06 | IDEA Consultants, Inc.        |
| Mr. Maehara Noritoshi | Team leader / Disaster management institution | 2011/10/25-2011/11/02 | IDEA Consultants, Inc.        |
| Mr. Maehara Noritoshi | Team leader / Disaster management institution | 2011/12/11-2011/12/23 | IDEA Consultants, Inc.        |
| Mr. Maehara Noritoshi | Team leader / Disaster management institution | 2012/01/11-2012/02/29 | IDEA Consultants, Inc.        |
| Mr. Jitsuhiro Noboru  | Sub-team leader / Disaster management plan    | 2011/05/05-2011/06/18 | IDEA Consultants, Inc.        |
| Mr. Jitsuhiro Noboru  | Sub-team leader / Disaster management plan    | 2011/11/16-2011/12/16 | IDEA Consultants, Inc.        |
| Mr. Jitsuhiro Noboru  | Sub-team leader / Disaster management plan    | 2012/01/12-2012/03/10 | IDEA Consultants, Inc.        |
| Mr. Koike Toru        | Sediment disaster management                  | 2011/05/05-2011/06/03 | Earth System Science, Co.Ltd. |
| Mr. Koike Toru        | Sediment disaster management                  | 2011/08/29-2011/09/17 | Earth System Science, Co.Ltd. |
| Mr. Koike Toru        | Sediment disaster management                  | 2011/10/03-2011/10/06 | Earth System Science, Co.Ltd. |
| Mr. Koike Toru        | Sediment disaster management                  | 2012/01/03-2012/03/12 | Earth System Science, Co.Ltd. |
| Mr. Kodama Makoto     | Flood management                              | 2011/07/04-2011/09/01 | IDEA Consultants, Inc.        |
| Mr. Kodama Makoto     | Flood management                              | 2011/10/11-2011/11/09 | IDEA Consultants, Inc.        |
| Mr. Kodama Makoto     | Flood management                              | 2011/11/24-2011/12/18 | IDEA Consultants, Inc.        |
| Mr. Kodama Makoto     | Flood management                              | 2012/01/11-2012/01/24 | IDEA Consultants, Inc.        |
| Mr. Kodama Makoto     | Flood management                              | 2012/02/02-2012/03/12 | IDEA Consultants, Inc.        |
| Mr. Sasaki Arata      | Community based disaster risk management      | 2011/05/01-2011/06/10 | Earth System Science, Co.Ltd. |
| Mr. Sasaki Arata      | Community based disaster risk management      | 2011/08/21-2011/09/10 | Earth System Science, Co.Ltd. |
| Mr. Sasaki Arata      | Community based disaster risk management      | 2011/12/03-2011/12/24 | Earth System Science, Co.Ltd. |
| Mr. Sasaki Arata      | Community based disaster risk management      | 2012/02/12-2012/03/10 | Earth System Science, Co.Ltd. |
| Mr. Onodera Jun       | Disaster Education                            | 2011/05/08-2011/07/15 | Earth System Science, Co.Ltd. |
| Mr. Onodera Jun       | Disaster Education                            | 2011/08/15-2011/09/19 | Earth System Science, Co.Ltd. |
| Mr. Onodera Jun       | Disaster Education                            | 2012/01/16-2012/02/28 | Earth System Science, Co.Ltd. |
| Mr. Koyabu Takeshi    | Disaster management exercise                  | 2011/05/27-2011/06/25 | IDEA Consultants, Inc.        |
| Mr. Koyabu Takeshi    | Disaster management exercise                  | 2012/02/25-2012/03/05 | IDEA Consultants, Inc.        |
| Mr. Kodama Makoto     | Coordinator                                   | 2011/05/27-2011/06/25 | IDEA Consultants, Inc.        |
| Mr. Kodama Makoto     | Coordinator                                   | 2011/11/10-2011/11/14 | IDEA Consultants, Inc.        |

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## Training in Japan

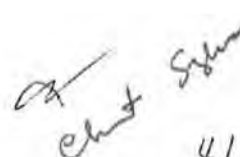
ANNEX 5-1

| Name   | Training Period       | TF              | Occupation   |
|--|-----------------------|-----------------|--|
| <b>1st Training in Japan Comprehensive Disaster Management</b>     |                       |                 |  |
| Mr. Prateep Keeratirekha   | 2010/11/29-2010/12/10 | Project Manager | Deputy Director,DDPM   |
| Mr. Thaweeep Limpakomwanich  | 2010/11/29-2010/12/10 | TF1             | DPMA,DDPM  |
| Mr. Prawit Jampanya  | 2010/11/29-2010/12/10 | TF1             | Director of Central Weather Forecast Division, Thai Meteorological Department  |
| Mr. Sompop Sucharit  | 2010/11/29-2010/12/10 | JCC member      | Senior Expert on Irrigation Engineering RID  |
| Mr. Montree Chanachaiviboonwat                                     | 2010/11/29-2010/12/10 | TF1             | Director of Disaster Prevention and Mitigation Policy Bureau, DDPM   |
| Ms. Siriporn Vachirasuriya   | 2010/11/29-2010/12/10 | TF1             | Plan and Policy Analyst,Disaster Prevention and Mitigation Policy Bureau,  |
| Ms. Anaya Tianhom  | 2010/11/29-2010/12/10 | TF1             | Plan and Policy Analyst,DPM Policy Bureau, DDPM  |
| Mr. Songchai Rohitachart   | 2010/11/29-2010/12/10 | TF2             | Director,DP Promotion Bureau, DDPM   |
| Mr. Natchanon Sonprasert   | 2010/11/29-2010/12/10 | TF2             | Participation Promotion Division,DP Promotion Bureau, DDPM   |
| Ms. Oranut Lo-Ounium   | 2010/11/29-2010/12/10 | TF2             | Plan and Policy Analyst, DP Promotion Bureau, DDPM   |
| Ms. Luckana Manimmanakorn  | 2010/11/29-2010/12/10 | TF3             | Technical Deputy Director,DPMA   |
| Mr. Chaitawat Siwabowon  | 2010/11/29-2010/12/10 | TF3             | Training Deputy Director,DPMA  |
| Ms. Chakreeya Setthaseree  | 2010/11/29-2010/12/10 | TF3             | Plan and Policy Analyst,DPMA   |
| Mr. Sombat Sutthipornmaneewal                                      | 2010/11/29-2010/12/10 | TF4             | Director of ESAO Lampang Area,OBEC,MOE   |
| Mr. Somsong Ngamwong   | 2010/11/29-2010/12/10 | TF4             | Chief of International Cooperation Unit,Office of Permanent Secretary, MOE   |
| Mrs. Vipawan Waithanomsat  | 2010/11/29-2010/12/10 | TF4             | Educational Officer, Professional Level, Office of Non formal Education, MOE   |
| Mrs. Sararat Leepaiboon  | 2010/11/29-2010/12/10 | TF4             | Educational Officer, Professional Level,OBEC,MOE   |
| Mr. Anusorn Kaewkangwan  | 2010/11/29-2010/12/10 | Sub-TF          | Director,DPM Regional Office 10  |
| Mr. Choornporn Intathep  | 2010/11/29-2010/12/10 | Sub-TF          | Chief, DPM Provincial Office Lamphun   |
| Mr. Nattawat Singkaew  | 2010/11/29-2010/12/10 | Sub-TF          | Plan and Policy Analyst, DPM Provincial Office Lampang   |
| <b>2nd Training in Japan for Comprehensive Disaster Management</b> |                       |                 |  |
| Mr. Suraphol Lekkao  | 2011/10/11-2011/10/20 |                 | Director,Disaster Prevention Criteria Bureau, DDPM   |
| Mr. Suwith Kosuwan   | 2011/10/11-2011/10/20 | JCC member      | Bureau of Environmental Geology and Geohazards, Department of Mineral Resources  |
| Mr. Sirichai Manachai  | 2011/10/11-2011/10/20 | JCC member      | Department of Local Administration, MOI  |
| Mr. Sithigon Kwandee   | 2011/10/11-2011/10/20 | TF1             | Plan and Policy Analyst,DPM Policy Bureau, DDPM  |
| Ms. Daowan Saeng-Ong   | 2011/10/11-2011/10/20 | TF1             | Plan and Policy Analyst,DPM Policy Bureau, DDPM  |
| Ms. Kamonwan Chidpakdee  | 2011/10/11-2011/10/20 | TF2             | Plan and Policy Analyst,DP Promotion Bureau, DDPM  |
| Ms. Pallarin Phukit  | 2011/10/11-2011/10/20 | TF2             | Plan and Policy Analyst,DP Promotion Bureau, DDPM  |
| Mr. Raywat Pongsuwan   | 2011/10/11-2011/10/20 | TF3             | DPMA, DDPM   |
| Ms. Paorumpai Janya  | 2011/10/11-2011/10/20 | TF3             | DPMA, DDPM   |
| Mr. Wirayut Khuankhit  | 2011/10/11-2011/10/20 | Sub-TF          | Director of Maehang Wittaya School,Lampang   |
| Mr. Vattana Sacon  | 2011/10/11-2011/10/20 | Sub-TF          | DPM Regional Center 10, DDPM   |
| Mr.Krichpet Petcharaburanin  | 2011/10/11-2011/10/20 | Sub-TF          | Chief of DPM Provincial Office,DPM Lampang Province  |
| Mr. Jumroun Kulsonposakul  | 2011/10/11-2011/10/20 | Sub-TF          | Municipality Clerk of Wiang Mok,Lampang Province   |
| Mr. Seri Sriwan  | 2011/10/11-2011/10/20 | Sub-TF          | Civil Works Technician, Senior Level,DPM Lamphun Office  |
| Mr. Wichai Pukdee  | 2011/10/11-2011/10/20 | Sub-TF          | Mayor, Li Municipality,Lamphun Province  |
| <b>3rd Training in Japan for Disaster Education</b>                |                       |                 |  |
| Mr. Chanvech Boonpradern   | 2011/11/29-2011/12/06 | TF4             | College Director,Office of the vocational education commission, Kansanapisek Industrial and Community College, Nonciok |
| Mr. Pradit Chairasitroj  | 2011/11/29-2011/12/06 | TF4             | Chief, Education Promotion Unit , Office of the Private Education Commission   |

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|-------------------------------|-----------------------|-----|---|
| Mr. Prachack Changrau         | 2011/11/29-2011/12/06 | TF4 | Director of Lamphun Primary Educational Service Area office 2   |
| Mr. Punya Chaowasaku          | 2011/11/29-2011/12/06 | TF4 | Teacher, Ban Kanglaung School, Kanchanaburi province  |
| Mr. Charoon Chotchoi          | 2011/11/29-2011/12/06 | TF4 | Director, Banthamtalord School, Nakhon Si Thammarat Province  |
| Mr. Kawinkiat Nonthapala      | 2011/11/29-2011/12/06 | TF4 | Director, Office of Ubon Ratchathani Primary Educational Service Area office 1  |
| Mr. Paiboon Pongtatsana       | 2011/11/29-2011/12/06 | TF4 | Director, Office of Nakhon Si Thammarat Primary Educational Service Area office 2   |
| Mr. Sutam Ruangpayungsak      | 2011/11/29-2011/12/06 | TF4 | Deputy Director, Office of Kanchanaburi Primary Educational Service Area office 1   |
| Ms. Weena Akraithan           | 2011/11/29-2011/12/06 | TF4 | Director, Bureau of Academic Affairs and Educational Standards, Office of the Basic Education Commission                      |
| Ms. Pantip Chaturanont        | 2011/11/29-2011/12/06 | TF4 | Educator, Bureau of Academic Affairs and Educational Standards, Office of the Basic Education Commission                      |
| Ms. Nongnaphat Chuenchowwai   | 2011/11/29-2011/12/06 | TF4 | Teacher, Muangsampee School, Lamphun Province   |
| Ms. Uraivan Intayarat         | 2011/11/29-2011/12/06 | TF4 | Director, Office of Nakhon Si Thammarat Nonformal and Informal Education, Office of Nonformal and Informal Education          |
| Ms. Wannaporn Pachop          | 2011/11/29-2011/12/06 | TF4 | Teacher, Kudua School, Ubon Ratchathani Province  |
| Ms. Wannaporn Peansara        | 2011/11/29-2011/12/06 | TF4 | Policy and Plan Analysis, Senior Professional Level, Bureau of Policy and Strategy, Office of the Permanent Secretary         |
| Ms. Karuna Sirirerkudomporn   | 2011/11/29-2011/12/06 | TF4 | Public Relation Officer, Professional Level Bureau of General Administration Office, Office of the Basic Education Commission |
| Ms. Yauwaluck Tearonabanchong | 2011/11/29-2011/12/06 | TF4 | Head of Educational Material Development, Bureau Academic Affairs and Education, Office of the Basic Education Commission     |
| Ms. Siriwan Tongdang          | 2011/11/29-2011/12/06 | TF4 | Teacher, Banhadhong School, Chumphon province   |
| Ms. Patchara Wongcomton       | 2011/11/29-2011/12/06 | TF4 | Director, Muangsampee School, Lamphun Province  |

  
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Site visit in Indonesia for new type CDDR activity

Annex 5-2

| No | Name                          | Position  | Organization |
|----|-------------------------------|---|--------------|
| 1  | Mr. Anusorn Kaewkangwan       | Director of DPMRC 10 Lampang  | DDPM         |
| 2  | Actiong Maj. Thira Santimethi | Director of DPMRC 12 Songkhla   | DDPM         |
| 3  | Mrs. Ratirot Meekamheang      | Head of Group Strategy and Management. DPMRC 8 Kamphaeng Phet                           | DDPM         |
| 4  | Mr. Preecha Disthacharoen     | Head of the rescue resources. DPM RC 6 Khon Kaen  | DDPM         |
| 5  | Mrs. Supornrat Sangmalee      | Office of DPM Provincial in Khon Kaen   | DDPM         |
| 6  | Mrs. Wimol Chaiwat            | Chief, DPM Provincial Office, Saraburi  | DDPM         |
| 7  | Mr. Komson Suwanampa          | Chief, DPM Provincial Office, Chiang Mai  | DDPM         |
| 8  | Mr. Wedsuwan Ardwichai        | Chief, DPM Provincial Office, Ubon Ratchathani  | DDPM         |
| 9  | Mr. Songchai Rohitachart      | Director of Disaster Prevention Promotion Bureau  | DDPM         |
| 10 | Mr. Natchanon Sonprasert      | Director of Participation Promotion Section, Disaster Prevention Promotion Bureau       | DDPM         |
| 11 | Mrs. Amornthip Paksuchon      | Human Resource Officer, Senior Professional Level, Disaster Prevention Promotion Bureau | DDPM         |
| 12 | Ms. Sujinphorn Parnukan       | Plan and Policy Analyst, Practitioner Level, Disaster Prevention Promotion Bureau       | DDPM         |
| 13 | Mr. Sompob Sakdistanond       | Director, ESAO Nakhon Ratchasima Area 4   | MOE          |
| 14 | Mr. Wises Phuwichai           | Director, ESAO Ubon Ratchathani Area 4  | MOE          |
| 15 | Mr. Charoenchai Kittipeeradej | Deputy Director, ESAO Lampang Area 1  | MOE          |
| 16 | Mr. Somsil Chuangching        | Director, Banhadsuanya School   | MOE          |
| 17 | Mr. Somporn Nakpitux          | Director, Banpongpanok School   | MOE          |
| 18 | Mr. Gritipai Sangthong        | Educator, Office of the Non-Formal and Informal Education                               | MOE          |
| 19 | Mr. Suphaseat Kanakool        | Director, Kusum Technology  | MOE          |
| 20 | Mrs. Uraivan Salton           | Foreign Relations Officer, Office of the Private Education Commission                   | MOE          |

the period was 2011.12.5-2011.12.10


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## Procured Equipment

Annex 5-3

| No. | Arrival    | Name of equipment              | type             | Amount  | Maker              | Price(JPY) | Price(THB) |
|-----|------------|--------------------------------|------------------|---------|--------------------|------------|------------|
| 1   | 2011.7.30  | Message board for Community    | steel with glass | 1       | Pratu Ma Garhchang | 83,200     | 32,000     |
| 2   | 2011.7.30  | Rain gauge                     | RGR126           | 1       | Oregon             | 22,347     | 8,595      |
| 3   | 2011.7.30  | Rain gauge                     | RGR126           | 1       | Oregon             | 22,347     | 8,595      |
| 4   | 2011.7.30  | Siren                          | WA-251           | 1       | Whener             | 26,000     | 10,000     |
| 5   | 2011.8.13  | Message board for Community    | steel with glass | 1       | Pratu Ma Garhchang | 83,200     | 32,000     |
| 6   | 2011.8.13  | Message board for Community    | steel with glass | 1       | Pratu Ma Garhchang | 83,200     | 32,000     |
| 7   | 2011.8.13  | Rain gauge                     | RGR126           | 1       | Oregon             | 22,347     | 8,595      |
| 8   | 2011.8.13  | Siren                          | WA-251           | 1       | Whener             | 26,000     | 10,000     |
| 9   | 2011.10.29 | Sandbag                        | PP bag           | 20,000  | LTP                | 528,580    | 203,300    |
| 10  | 2011.11.1  | Sandbag                        | PP bag           | 230,000 | LTP                | 6,078,670  | 2,337,950  |
| 11  | 2012.1.11  | Data Logging Rain Gauge        | RG3-M            | 2       | ONSET              | 118,000    | 45,385     |
| 12  | 2012.1.11  | Data Logging Water Level Gauge | KIT-D-U20-01     | 4       | ONSET              | 249,000    | 95,769     |
| 13  | 2012.1.23  | Flood Simulation Software      | FLO-2D 2009      | 2       | FLO2D              | 501,732    | 192,974    |

calculated as 2.6JPY = 1Baht, US\$1=77.0JPY

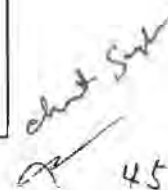
  
 W. Sangyuan  
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| Name                           | Occupation   | field of counterparts                     | assigned term | experts              | Task Force |
|--------------------------------|--|---|---------------|----------------------|------------|
| Mr. Montree Chanachaiwiboonwat | Director of Disaster Prevention and Mitigation Policy Bureau, DDPM   | Disaster Prevention and Mitigation Policy | 2010.11-      | Mr. Noboru Jitsuhiro | TF-1       |
| Mrs. Sudarat Chaoprasert       | Plan and Policy Analyst Senior Professional Level, MOE   | Disaster Education                        | 2010.11-      | Mr. Noboru Jitsuhiro | TF-1       |
| Mr. Adichat Surinkum           | Specialist in Geological Resource Management Consulting, Director of Environment Geology Division, Department of Mineral Resources | landslide                                 | 2010.11-      | Mr. Noboru Jitsuhiro | TF-1       |
| Mr. Sirichai Manachai          | Director of Monitoring Evacuation Section, Bureau of Local Administrative Development, DOLA  | Local Administrative Policy               | 2010.11-      | Mr. Noboru Jitsuhiro | TF-1       |
| Gp. Capt. Somsak Khaosuwan     | Director of Warning System Administration, NDWC  | Warning for disaster                      | 2010.11-      | Mr. Noboru Jitsuhiro | TF-1       |
| Mr. Pongsthakorn Suvanpimol    | Senior Expert on Hydrology, RID  | Water management                          | 2010.11-      | Mr. Noboru Jitsuhiro | TF-1       |
| Mr. Prawit Jampanya            | Director of Central Weather Forecast Division, TMD   | Weather Forecast                          | 2010.11-      | Mr. Noboru Jitsuhiro | TF-1       |
| Mr. Suporn Sodsoon             | Chief of MEKHALA Center, DWR   | Water Resource Management                 | 2010.11-      | Mr. Noboru Jitsuhiro | TF-1       |

W. Sangyuan  
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|                              |  |   |          |                                     |      |
|------------------------------|--|---|----------|-------------------------------------|------|
| Ms. Wilairat Kahasathien     | Human Resource Officer, Senior Professional level, Disaster Prevention and Mitigation Promotion Bureau | Promotion of Disaster Management          | 2010.11- | Mr. Noboru Jitsuhiro                | TF-1 |
| Mr. Raywat Pongsuwan         | Deputy Director, General Administrative Division, DPMA   | Human development                         | 2010.11- | Mr. Noboru Jitsuhiro                | TF-1 |
| Mr. Amnat Phonmart           | Disaster Prevention Criteria Bureau, DDPM  | Disaster Prevention and Mitigation Policy | 2010.11- | Mr. Noboru Jitsuhiro                | TF-1 |
| Mrs. Suchada Lokakalin       | Director of Plan and Budget Section, DDPM  | finance                                   | 2010.11- | Mr. Noboru Jitsuhiro                | TF-1 |
| Ms. Chatchadaporn Boonyavaha | Disaster Prevention and Mitigation Policy Bureau, DDPM   | Disaster Prevention and Mitigation Policy | 2010.11- | Mr. Noboru Jitsuhiro                | TF-1 |
| Ms. Siriporn Vachirasuriya   | Disaster Prevention and Mitigation Policy Bureau, DDPM   | Disaster Prevention and Mitigation Policy | 2010.11- | Mr. Noboru Jitsuhiro                | TF-1 |
| Mr. Siithigon Kwandee        | Disaster Prevention and Mitigation Policy Bureau, DDPM   | Disaster Prevention and Mitigation Policy | 2010.11- | Mr. Noboru Jitsuhiro                | TF-1 |
| Mr. Thaweech Limpakornvanich | DPMA   | Human development                         | 2010.11- | Mr. Noboru Jitsuhiro                | TF-1 |
| Mr. Songchai Rohitachart     | Director of Disaster Prevention and Mitigation Promotion Bureau  | Promotion of Disaster Management          | 2010.6 - | Mr. Sasaki Arata • Lolita c. Garcia | TF-2 |
| Mr. Natchanon Sonprasert     | Director of Participation Promotion Section, Disaster Prevention and Mitigation Promotion Bureau       | Promotion of Disaster Management          | 2010.6 - | Mr. Sasaki Arata • Lolita c. Garcia | TF-2 |

  
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 W. Sangsri

|                           |   |                                  |           |                                    |      |
|---------------------------|---|----------------------------------|-----------|------------------------------------|------|
| Ms Oranut Lo-ounlum       | Plan and Policy Analyst of Participation Promotion Section, Disaster Prevention and Mitigation Promotion Bureau | Promotion of Disaster Management | 2010.6 -  | Mr.Sasaki Arata • Lolita c. Garcia | TF-2 |
| Ms Kamolwan Jidpakdee     | Plan and Policy Analyst of Participation Promotion Section, Disaster Prevention and Mitigation Promotion Bureau | Promotion of Disaster Management | 2010.6 -  | Mr.Sasaki Arata • Lolita c. Garcia | TF-2 |
| Ms Wilairat Kahasathien   | Human Resource Officer, Senior Professional level, Disaster Prevention and Mitigation Promotion Bureau          | Promotion of Disaster Management | 2010.6 -  | Mr.Sasaki Arata • Lolita c. Garcia | TF-2 |
| Ms. Pallarin Phukit       | Plan and Policy Analyst of Participation Promotion Section, Disaster Prevention and Mitigation Promotion Bureau | Promotion of Disaster Management | 2010.10 - | Mr.Sasaki Arata • Lolita c. Garcia | TF-2 |
| Ms.Kamolwan Klapsri       | Plan and Policy Analyst of Participation Promotion Section, Disaster Prevention and Mitigation Promotion Bureau | Promotion of Disaster Management | 2010.10 - | Mr.Sasaki Arata • Lolita c. Garcia | TF-2 |
| Mr. Chonlatis Polsucharit | Plan and Policy Analyst of Participation Promotion Section, Disaster Prevention and Mitigation Promotion Bureau | Promotion of Disaster Management | 2010.10 - | Mr.Sasaki Arata • Lolita c. Garcia | TF-2 |
| Mr. Natthawut Singkeaw    | Plan and Policy Analyst of DPM Provincial Office Lampang  | CBDRM Facilitator                | 2011.5 -  | Mr.Sasaki Arata • Lolita c. Garcia | TF-2 |

Chut Sapha

|                         |  |                    |                     |  |      |
|-------------------------|--|--------------------|---------------------|--|------|
| Mr. Witthawat Srikamdee | Typist of DPM Provincial Office<br>Lampang   | CBDRM Facilitator  | 2011.5 -            | Mr.Sasaki<br>Arata • Lolita c.<br>Garcia | TF-2 |
| Mr. Surasak Manochai    | Machinical engineer of DPM<br>Provincial Office Lamphun  | CBDRM Facilitator  | 2011.5 -            | Mr.Sasaki<br>Arata • Lolita c.<br>Garcia | TF-2 |
| Mr. Seri Sriruen        | Civil Works Technician of DPM<br>Provincial Office Lamphun   | CBDRM Facilitator  | 2011.5 -            | Mr.Sasaki<br>Arata • Lolita c.<br>Garcia | TF-2 |
| Mr. Somsab Tongtae      | Plan and Policy Analyst of DPM<br>Regional Center 10(Lampang)  | CBDRM Facilitator  | 2011.5 -            | Mr.Sasaki<br>Arata • Lolita c.<br>Garcia | TF-2 |
| Mr. Wanchai Kamplang    | Plan and Policy Analyst of DPM<br>Regional Center 10(Lampang)  | CBDRM Facilitator  | 2011.5 -<br>2011.12 | Mr.Sasaki<br>Arata • Lolita c.<br>Garcia | TF-2 |
| Mr. Vattana Sacon       | Plan and Policy Analyst of DPM<br>Regional Center 10(Lampang)  | CBDRM Facilitator  | 2011.12 -           | Mr.Sasaki<br>Arata • Lolita c.<br>Garcia | TF-2 |
| Mr.Pornpoth Penpas      | Director of Disaster Prevention and<br>Mitigation Academy  | Human development  | 2010.11-            | Mr. Maehara<br>Noritoshi                 | TF-3 |
| Mr. Julapong Julasukon  | MOE  | Disaster Education | 2010.11-            | Mr. Maehara<br>Noritoshi                 | TF-3 |
| Mr.Adichat Surinkum     | Specialist in Geological Resource<br>Management Consulting, Director<br>of Environment Geology Division,<br>Environment Geology Division,<br>Department of Mineral Resources | landslide          | 2010.11-            | Mr. Maehara<br>Noritoshi                 | TF-3 |

W. Sangyapang  
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|                            |   |   |          |                       |      |
|----------------------------|---|---|----------|-----------------------|------|
| Ms. Siwaporn Pramontprawat | Director of Training Unit, Structure Development and Human Resource Management                      | river management                              | 2010.11- | Mr. Maehara Noritoshi | TF-3 |
| Mr. Prawit Jampanya        | Director of Central Weather Forecast Division, Thai Meteorological Department                       | Weather Forecast                              | 2010.11- | Mr. Maehara Noritoshi | TF-3 |
| Ms. Kamonwan Jitpakdee     | Plan and Policy Analyst Professional Level, Department of Disaster Prevention and Mitigation (DDPM) | Community Based Disaster Reduction Management | 2010.11- | Mr. Maehara Noritoshi | TF-3 |
| Ms. Samorn Srisiri         | Bureau of Gender Equality Promotion   | gender  | 2010.11- | Mr. Maehara Noritoshi | TF-3 |
| Ms. Luckana Manimmanakorn  | Technical Deputy Director, Disaster Prevention and Mitigation Academy                               | training curriculum, training evaluation      | 2010.11- | Mr. Maehara Noritoshi | TF-3 |
| Ms. Paorumpai Janya        | Disaster Prevention and Mitigation Academy  | training curriculum                           | 2010.11- | Mr. Maehara Noritoshi | TF-3 |
| Ms. Chakreeya Setthaseree  | Plan and Policy Analyst Professional Level, Disaster Prevention and Mitigation Academy              | Human development                             | 2010.11- | Mr. Maehara Noritoshi | TF-3 |
| Ms. Kanokporn Chucherd     | Foreign Relations Professional Level, Research and International Cooperation Bureau                 | coordinator                                   | 2010.11- | Mr. Maehara Noritoshi | TF-3 |
| Ms. Sararat Leepaiboon     | BAAE, OBEC, MOE   | Disaster Education                            | 2010.6-  | Mr. Onodera Jun       | TF-4 |
| Ms. Pornchan Pornsakkul    | Bureau of Policy and Plan, OBEC, MOE  | Disaster Education                            | 2010.6-  | Mr. Onodera Jun       | TF-4 |
| Mr. Junrapong Junrasukol   | Bureau of General Administration, OBEC, MOE   | Disaster Education                            | 2010.6-  | Mr. Onodera Jun       | TF-4 |
| Ms. Parnthip Jaturanon     | BAAE, OBEC, MOE   | Disaster Education                            | 2010.6-  | Mr. Onodera Jun       | TF-4 |

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W. Sangnapan

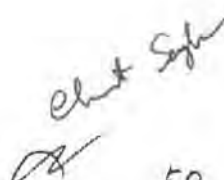


|                            |   |                    |                |                                      |      |
|----------------------------|---|--------------------|----------------|--------------------------------------|------|
| Ms. RungKan Punnukdee      | Bureau of International Cooperation, MOE            | Disaster Education | 2010.6-2011.12 | Mr. Onodera Jun                      | TF-4 |
| Ms. Prapapom Chantarasamee | Bureau of International Cooperation, MOE            | Disaster Education | 2011.12-       | Mr. Onodera Jun                      | TF-4 |
| Ms. Weena Akaratham        | BAAE, OBEC, MOE                                     | Disaster Education | 2010.11-       | Mr. Onodera Jun                      | TF-4 |
| Mr. Paisal Wisalapron      | Director of International Cooperation Bureau        | Disaster Education | 2010.6-2011.9  | Mr. Onodera Jun                      | TF-4 |
| Mr. Pradit Chaiprasitroth  | Office of Private Education                         | Disaster Education | 2010.6-        | Mr. Onodera Jun                      | TF-4 |
| Mr. Somsong Ngamwong       | Chief of International Cooperation Sub-bureau       | Disaster Education | 2010.6-        | Mr. Onodera Jun                      | TF-4 |
| Mrs. Wipawan Withanomsak   | Office of Non formal Education                      | Disaster Education | 2010.6-        | Mr. Onodera Jun                      | TF-4 |
| Ms. Churairat Sangboonnun  | Chief of Inspector                                  | Disaster Education | 2011.4-        | Mr. Onodera Jun                      | TF-4 |
| Mrs. Uraivan Saltan        | Policy and Plan Bureau, Office of Private Education | Disaster Education | 2010.6-        | Mr. Onodera Jun                      | TF-4 |
| Mr. Paitoon Naktae         | Chief of Safety Standard Sub-Bureau                 | Civil Engineer     | 2011.10-       | Mr. Koike Toru*<br>Mr. Kodama Makoto | TF-5 |
| Mr. Monchai Manosamuth     | Safety Standard Sub-Bureau                          | Civil Engineer     | 2011.10-       | Mr. Koike Toru*<br>Mr. Kodama Makoto | TF-5 |
| Mr. Amnat Phonmart         | Safety Standard Sub-Bureau                          | Civil Engineer     | 2011.10-       | Mr. Koike Toru*<br>Mr. Kodama Makoto | TF-5 |
| Mr. Banyat Yaiquino Luam   | Safety Standard Sub-Bureau                          | Civil Engineer     | 2011.10-       | Mr. Koike Toru*<br>Mr. Kodama Makoto | TF-5 |
| Mr. Somsak Wan Seng        | Safety Standard Sub-Bureau                          | Civil Engineer     | 2011.10-       | Mr. Koike Toru*<br>Mr. Kodama Makoto | TF-5 |

Chief Sapha  
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W. Sangunpanya

|                         |                           |                |          |   |      |
|-------------------------|---------------------------|----------------|----------|---|------|
| Mr. Kirruit Danpitak    | Safty Standard Sub-Bureau | Civil Engineer | 2011.10— | Mr. Koike Toru*<br>Mr. Kodama<br>Makoto | TF-5 |
| Mr. Somchy Luengchatchi | Safty Standard Sub-Bureau | Civil Engineer | 2011.10— | Mr. Koike Toru*<br>Mr. Kodama<br>Makoto | TF-5 |

  
 W. Sangunyan 50



