Annex 3: 6 Monthly Reporting Template

Progress Report

Vulnerability and Climate Change Adaptation Assessment and Supportive Policies at National and Sub-national Levels

Report No.	1	**Period Covered**	May 2010 – April 2011	**Author**	Tilman Hertz

Summary of Progress against Objectives

Progress against Objectives (main & particular)

The main Project Objective (as per agreement): 1) to further develop and replicate the nationally approved V-A methodology, 2) to develop adaptation strategies on local levels, 3) to secure implementation by adequate budgeting and financing, including the development of innovative financing and policy instruments.

Progress as of April 2011: The Project "Vulnerability and Climate Change Adaptation Assessment and supportive policies at National and sub-national Levels" is well on the way of reaching the above named project objective. Most of the activities of the first phase, scientific phase have been completed (the analyses for Tarakan and South Sumatra are virtually complete, the analysis for the Malang area has started). At the same time, some activities of the second phase, policy phase, have already started (meetings to prepare the mainstreaming of the results of the analysis into the various development plans have been held in Tarakan and South Sumatra). Progress against the particular objectives (as per agreement) is discussed in more detail below. As of now, it can be said that the scientific phase is completed by 2/3, whereas the policy phase is completed by 1/4. A number of events have been organized up to this point in the project course to support these activities needed to reach the main & particular project objectives (see ANNEX 1 for a List).

Particular Objectives (as per agreement):

1. **Particular Objective:** To enhance awareness on climate change impact and its management for regional/local government and stakeholders.
   Progress: two Public Consultations have been held in Tarakan and South Sumatra and one in Malang area (a second will follow approx. in May 2011). The Public Consultations served two purposes: first, enhancing awareness on climate change impact and its management for regional/local government and second, to revise/refine the Climate Change Risk Maps (these GIS Maps show Climate Change Impact for 2030). To serve these purposes, it was necessary to reach a wide audience. Participants of the Public Consultations included therefore the local/regional governments (BAPPEDA, WALIKOTA), the respective DINAS (esp. Agriculture, Health, Marine and Fisheries, Public Works) and other important stakeholders (NGOs, Agricultural Association etc…). In addition to the Public Consultation, an intermediate progress meeting for Tarakan and South Sumatra respectively, was organized and attended by members of the regional/local governments. There too, awareness on climate change impact and its management for regional/local government and stakeholders was enhanced.
   Next to these events, the project aims also at establishing a more permanent

platform to enhance awareness on climate change impact and its management for all Indonesian regional/local government and stakeholders. A concept for a web based Climate Change Information Clearinghouse, specifically tailored to the needs of local/regional governments, is currently under development and will be discussed with KLH.

2. **Particular Objective**: to further develop, replicate and apply methods and tools, which have been applied in Lombok Island (Risk and Adaptation Assessment to Climate Change on Lombok Island, KLH and GIZ, 2009) to South Sumatra province, Tarakan City and an urban area on Java Island in order to assess climate change vulnerability and design adaptation strategies as well as to integrate its result into regional/local development planning.
   Progress: The methods and tools which have been applied in Lombok Island (NTB Province) have been further developed, refined and applied to South Sumatra province, Tarakan City and Malang area. In more detail, in South Sumatra the meso level approach that has already been used on Lombok has been replicated. A micro level approach has been newly developed and applied in Tarakan Municipality and in parts of Greater Malang (Malang Raya). Some distinctive characteristics of the micro approach compared to the meso one are: (1) The level of accuracy is high; (2) Output of study are Adaptation Measures (as compared to Strategies for the meso level and Policies for the macro level); (3) Area covered is Regency or Municipality (see Annex 2). For instance, with the micro level approach in Tarakan, it is possible to determine the exact number of potentially inundated houses by sea level rise, while in South Sumatera, the meso level assessment only considers the area that will be potentially inundated based on land use classification.
   Furthermore, both approaches have been further developed by integrating low scale development scenarios into the analysis (combining trend parameters such as population growth with long term Land Use Maps) in order to give a more accurate idea of Future Vulnerability to Climate Change. In addition, a prioritization tool for adaptation options is currently under development.

3. **Particular Objective:** To mainstream adaptation to climate change into regional/local development planning.
   Progress: This project will, as planned, influence the annual development plans for 2012 and draft policy recommendations to be integrated into the next RPJMDs (Local Midterm Development Plans), on the basis of Law 32/2009. Although it is not mentioned in the Agreement between AusAID and GIZ, this project also focuses on Spatial Planning (RTRW). For Tarakan, two meetings have already taken place (one in the aftermath of the 2nd Public Consultation, and a second one in early February 2011 in Bandung with representatives of the local governments as well as the spatial planning bureau for Tarakan, see Annexes 3 and Annex 4 (Annex 4 provides an example for the impacts on the Coastal Sector only. Hazards considered on the coastal areas are seal level rise, tides, waves, La Nina and surges. The Water Sector, Health Sector and Agricultural Sector have produced similar maps that can be upon request.). For South Sumatra, a meeting for influencing the RTRW was held in the aftermath of the 2nd Public Consultation (see Annex 3).

4. **Particular Objective:** To build capacity of stakeholders related to vulnerability and adaptation issues on the local level.
   Progress: The team is currently preparing 2 types of Guidelines so as to increase the Capacities for Stakeholders on the local level. These are Guidelines for doing Climate Change Risk Assessments (KRAPI - Pedoman Kajian Risiko dan Adaptasi Perubahan Iklim) and Guidelines for

Mainstreaming Vulnerability and Adaptation Issues into Development Planning. A first draft of KRAPI is already available. A first Draft of the Guidelines for Mainstreaming Vulnerability and Adaptation Issues into Development Planning is currently under development.

5. **Particular Objective:** To streamline aspects of climate change adaptation and disaster preparedness (Case study Malang)
   Progress: A Consultant has been identified and will be integrated in the team for the Malang study. Particular emphasis will lie on identifying possible mechanisms so as to streamline Disaster Risk Governance Regimes and Climate Change Adaptation Governance Regime on the local level.

6. **Particular Objective:** To support and provide input to national level policy-making and development planning, especially with a view to support local level adaptation strategies and planning.
   Progress: National level policy making and development planning should support local level adaptation. There are essentially two ways of supporting local level adaptation. One is by improving national level policy framework conditions so as to improve local level adaptation, the second is by giving direct substance input into a national strategy in terms of e.g. climate change vulnerabilities, thereby supporting the implementation of the strategy.
   At present, the project "Vulnerability and Climate Change Adaptation Assessment and supportive policies at National and sub-national Levels" focuses on the first way, in view of supporting the second at a later stage, in the framework of a potential upscaling of the project (e.g. by doing Climate Change Risk Assessments for all priority areas in Indonesia. On the basis of such CCRAs, the implementation of a national strategy can be supported considerably). Hence, as far as this first way is concerned, progress has been made especially regarding the Guidelines for doing Climate Change Vulnerability Assessments (activity has started) and the Guidelines for Mainstreaming Climate Change Adaptation into Development Planning (activity has started). Providing information about funding options for financing Climate Change Adaptation activities (not started yet) and how to streamline it with Disaster Risk Reduction (activity will start in May 2011) will follow soon. As far as the second element is concerned, there are currently discussions within BAPPENAS, KLH and DNPI to develop and implement a National Climate Change Adaptation Strategy. There exist currently several national policy guidance documents such as the Indonesia Climate Change Sectoral Roadmap (ICCSR) or the 2nd Nat Com that identify what area in Indonesia will be at risk of drought, floods etc. This is very useful when identifying priority areas and formulating general policies. But it is not enough when it comes to implementing these general policies via concrete actions on the local level and estimating the corresponding financial need. For this, these priority areas require a detailed analysis that can support the implementation of such a strategy for climate change adaptation – the approach developed by this project is an approach that can provide these detailed local analyses. The project "Vulnerability and Climate Change Adaptation Assessment and supportive policies at National and sub-national Levels" currently advises the respective units in BAPPENAS and KLH: an upscaling of the present project to all priority areas in Indonesia, as basis for national strategy formulation and implementation, is an important element of this advice.

   Particular Objective: To develop the capacity of local government in fiscal and financial areas and increase their capability in accessing national and international sources of fund. The financial mechanism should be developed in

the context of the Indonesia Climate Change Trust Fund (ICCTF) investment window on adaptation and resilience, thereby providing the mechanism to the ICCTF, which local governments can use to access funds.
Progress: This activity has not started yet. It will start as soon as adaptation options have been identified.

Indicators

Phase 1 Indicators:

1. **Climate change adaptation and vulnerability database is available and used by local governments and stakeholders.** Status: The Concept for a Web-based Climate Change Adaptation Information Clearinghouse for local governments is under development. Discussions with KLH will start soon so as to discuss the further steps.
2. **V-A assessment report is available and recommendations are agreed upon by local governments and city administrations.** Status: Analysis for Tarakan and South Sumatra close to completion, analysis for the Malang area has started in April 2011

Phase 2 Indicators:

1. **Policy recommendations related to the inclusion of V-A issues into local level RPJM and annual strategic plans are available and endorsed by local governments.** Status: Some policy recommendations for Tarakan have been endorsed by local governments (RTRW) (see point 3 above and Annexes 3,4). These will be operationalized in subsequent meetings.
2. **A workable financial mechanism to provide funding for local level adaptation strategies is available.** Status: not started yet

Contribution to AusAID Outcomes & Indicators

AusAID targeted Outcome: "Locally generated new knowledge of climate change adaptation being used in strategy development at all levels of government
Contribution to AusAID targeted Outcome: The project "Vulnerability and Climate Change Adaptation Assessment and supportive policies at National and sub-national Levels" provides directly several types of information that can be used in strategy development at all levels of government, especially when it comes to strategy formulation and strategy implementation. On the one hand the project supports the formulation of local strategy development, by providing detailed information about the vulnerability of some areas (Tarakan, South Sumatra and Malang) to Climate Change. On the other hand, the outputs of the project facilitate the implementation of such a Climate Change Adaptation strategy by improving the national framework policy conditions for Climate Change Adaptation. This relates especially to identifying & exploring funding options for Climate Change Adaptation, the streamlining with Disaster Risk Management, the drafting of Guidelines for doing such CCA Assessments & training of Centers of Excellence for using such Guidelines as well as Guidelines for mainstreaming CCA into development planning.

Indicators

1. **Pilot CC vulnerability needs assessments undertaken at district and provincial levels.** Contribution of the project to AusAID indicator: Pilot CC vulnerability assessments are undertaken at district level (Tarakan, Malang) and province level (South Sumatra)

	2. **National Strategy informed by the vulnerability assessments.** Contribution of the project to AusAID indicator: Up to now, only National Policy Guidance Documents exist in the area of Climate Change Adaptation, such as the ICCSR (Indonesia Climate Change Sectoral Roadmap), the Second National Communication, or the Yellow Book. No nationally approved Climate Change Adaptation Strategy exists. There are discussions within BAPPENAS, KLH and DNPI for the need of such a National Strategy. The GIZ team advises the respective units in BAPPENAS and KLH regarding the need for a National Climate Change Adaptation Strategy that should include clear targets, time plans, clear work sharing among the different Indonesian institutions, corresponding finance and a robust legal mandate. Such a strategy will need to be based on Vulnerability Assessments, such as they are done in the framework of the present project. An upscaling of these Vulnerability Assessments (from pilots towards a comprehensive approach based on priority regions) will be necessary and constitutes an important element of GIZ advice. 3. **Capacities built across the national and sub-national levels to prepare adaptation and mitigation plans.** Contribution of the project to AusAID indicator: the project "Vulnerability and Climate Change Adaptation Assessment and supportive policies at National and sub-national Levels" aims at improving policy framework conditions national level for local level adaptation, thereby improving the Capacities of the stakeholders to formulate & implement adaptation and mitigation plans. Guidelines for doing Climate Change Risk Assessments, Guidelines for Mainstreaming Climate Change Adaptation into the various development plans, the identification of Climate Change Adaptation funding options for the local level and a streamlining of Climate Change Adaptation and Disaster Risk Management on the local level are examples. Furthermore, it is planned to train some Centers of Excellence (Universities) in the use of the RA method. So far, several potential candidates for Centres of Excellence have been identified such as: Unhas of Makassar (Hasanudin University), Unram (Mataram University), Undip of Semarang (Diponegoro University), Borneo University of Tarakan, Unsri of Palembang of South Sumatra (Sriwijaya University), Unibraw of Malang (Brawijaya University). Further discussions are necessary and will be led during the course of the year.

Activities (as per agreement)	**Progress/developments**
1. Define the problem and establish the context	Completed for all three areas
2. Identify (local/regional) climate hazards and overlying natural disaster risks	Completed for all three areas
3. Identify vulnerabilities of key impacted sectors	Completed for Tarakan and South Sumatra, Malang to follow in May 2011
4. Analyze and evaluate the risks and risks in combination	Completed for Tarakan and South Sumatra, Malang to follow in May 2011
5. Assess appropriate	In the process of formulation for Tarakan and South Sumatra,

adaptation strategy based on the risk	Malang to follow in May 2011
6. Integration into development policies at local level	Integration activities have started for Tarakan in February 2011 and South Sumatra in March 2011 for the Spatial Planning (RTRW), Malang to follow approx in May 2011. The policy documents for integration into present annual plans and upcoming RPJMDs will be prepared early 2012 (These documents will include financial options for the Climate Change adaptation options and how streamline the activities with Disaster Risk Management in the area etc.).
7. Integration into development policies on national government level: improvement of the framework policies for enabling adaptation on local levels	Integration activities have started: National Framework Policies for local level adaptation will be improved through following elements: Guidelines for doing Climate Change Risk Assessments (KRAPI), Guidelines for Mainstreaming Climate Change Adaptation into the various development plans, Streamlining of Climate Change Adaptation and Disaster Risk Management on the local level.
8. Design of effective financial and economic instruments to address adaptation action at local level	Not yet started
9. Training of local officials and staff (awareness of climate change VA, options for adaptation action)	Not yet started
Issues Impacting Progress	In November 2011 there has been a staff change within KLH Deputy III. Of the original staff (with whom the proposal & agreement has been jointly developed), only one remained. Since November 2011, the GIZ team has familiarized the new team with the project. The GIZ team has managed to undergo smooth transition with the new team. Indeed, the GIZ team has been frequently asked for providing advice on the adaptation policy and program of the newly established Climate Change Adaptation Unit in KLH.
Activities for Next 6 months	**Work to be Undertaken**
1. Identify vulnerabilities of key impacted sectors	The analysis in Malang is expected to finish in May 2011. After the first Public Consultation on April 14th 2011, a progress meeting will follow early May 2011, and the second Public Consultation soon after.
2. Analyze and evaluate the risks and risks in combination	The analysis in Malang is expected to finish in May 2011. After the first Public Consultation on April 14th 2011, a progress meeting will follow early May 2011, and the second Public Consultation soon after.
3. Assess appropriate	For Tarakan and South Sumatra, the development of the adaptation

adaptation strategy based on the risk	strategy has started in March and April respectively. The identification of appropriate sectoral adaptation options will take approx 2 month, followed by a prioritization of these adaptation options, which will also take approx 2-3 months. In the framework of these activities, several sectoral FGDs (Focus Group Discussions) will be conducted in the respective areas.
4. Integration into development policies at local level	Integration activities will continue for Tarakan and South Sumatra for the Spatial Planning (RTRW), and start in Malang approx in May 2011
5. Integration into development policies on national government level: improvement of the framework policies for enabling adaptation on local levels	In preparation - Guidelines for doing Climate Change Risk Assessments (KRAPI), Guidelines for Mainstreaming Climate Change Adaptation into the various development plans, Streamlining of Climate Change Adaptation and Disaster Risk Management on the local level.
6. Design of effective financial and economic instruments to address adaptation action at local level	This study will start in June/July 2011, as soon as three Climate Change Risk Analysis have been completed, and the adaptation strategy for integration into the various local development plans formulated
7. Training of local officials and staff (awareness of climate change VA, options for adaptation action)	Starts early 2012
Lessons Learned	The activities in Tarakan, South Sumatra, Malang and previously on Lombok Island give important information about actual and possible capacities (i.e. capacities that could be developed through capacity building) of local governments when it comes to Climate Change Adaptation. This is especially important when designing future Climate Change Adaptation activities in Indonesia in a comprehensive manner. Doing Climate Change Risk Analyses - as they are done by the Project "Vulnerability and Climate Change Adaptation Assessment and supportive policies at National and sub-national Levels" - is not something that can be expected to be done by local governments, even with capacity building. The technical expertise that is needed for doing such analyses is high – nevertheless, such analysis is needed so as to reduce the risk of Mal-adaptation to climate change (*Mal–adaptation* — when decisions are taken that make an activity or region more vulnerable to climate change; *Under–adaptation* — when climate change factors are given insufficient weight in decision making; *Over–adaptation* — when climate change factors are given too much weight - Australian Greenhouse Office, 2005). What can be expected to be done by local governments is the mainstreaming process. Hence, regarding the last activity mentioned above (No. 7, Training of local officials and staff (awareness of climate change VA, options for adaptation action), the project proposes to split this activity - especially in view of a potential upscaling: • When it comes to conducting the Climate Change Risk Assessments, there is need of more expertise in Indonesia.

	Hence, the project proposes to train some Centers of Excellence in Indonesia in the use of this method (KRAPI), once it has been refined and input has been gathered by other actors (e.g. CSIRO Lombok project). At the same time, it is important to assure corresponding finances so that local governments are able to supervise and coordinate such types of Climate Risk Assessments. Therefore, the activity "Design of effective financial and economic instruments to address adaptation action at local level" will identify explicitly corresponding funding options (international and national) for doing such Climate Change Risk Assessments. • Hence, the local officials & staff will not be trained for doing the Climate Change Risk Assessments, but specifically for the mainstreaming process of Climate Change Adaptation into Development Planning that will happen on the basis of such assessments. Comprehensive Guidelines will be prepared and disseminated through various channels so as to reach the maximum of local governments.
Conclusions	The project is on the right track, no significant changes are to be expected in the next 6 months. Looking beyond the project's immediate focus, it can be expected that this project has a great potential for upscaling. Up to now, there are several Policy Guidance Documents that exist in the area of Climate Change Adaptation, such as the ICCSR (Indonesia Climate Change Sectoral Roadmap), the Second National Communication, or the Yellow Book. This is very useful and necessary when it comes to identifying priority areas and the formulation of policies at national level. However policies have to be implemented via concrete actions at local (meso and micro) levels in those priority areas. For these priority areas, detailed analyses on the local level are necessary. The proven approach of the project "Vulnerability and Climate Change Adaptation Assessment and supportive policies at National and sub-national Levels" could do this and therefore provide the basis, the groundwork for the formulation and subsequent implementation of an Indonesian strategy for Climate Change Adaptation that is currently under discussions within BAPPENAS, KLH and DNPI.

ANNEX 1 – Events

1.1 Kick Off Meeting

No.	Agenda	Date	Place
1	Kick Off Meeting	August 10th, 2010	Borobudur Hotel, Jakarta

1.2 Public Consultations

No.	Agenda	Date	Place
1	Public Consultation, Tarakan Municipality	May 26th, 2010	Tarakan Municipality
2	Public Consultation, South Sumatra Province	July 6th, 2010	Palembang
3	Dissemination of VA in Greater Malang	December 9th, 2010	Malang Municipality
4	2nd Public Consultation, Tarakan Municipality	February 1st, 2011	Tarakan Municipality
5	Coordination Meeting between GIZ-KLH and BLH-Bappeda of Kabupaten and Kota in Greater Malang	February 7th, 2011	Jakarta
6	2nd Public Consultation, South Sumatra Province	March 15th, 2011	Palembang
7	1st Public Consultation, Greater Malang	April 18th, 2011	Batu Municipality

1.3 Surveys

No.	Agenda	Date	Place
1	Surveys of Water and Health Sectors	September 27th-October 1st, 2010	Tarakan Municipality
2	Surveys of Coastal, Water, Health and Agriculture Sectors	October 10th-15th, 2010	Palembang and all Districts in South Sumatra Province
3	Surveys of Water Sector	October 27th, 2010	Tarakan Municipality

1.4 Focus Group Discussions

No.	Agenda	Date	Place
1	FGD on Tarakan Assessment	August 20th, 2010	Bandung
2	FGD on South Sumatra Assessment	December 22nd, 2010	Bandung
3	FGD on Tarakan Mainstreaming VA into Development & Spatial Plannings	February 16th, 2011	Bandung

1.5. Project Coordination / Scientific Coordination Meetings

No.	Date	Place	Attendants (see below for abbreviations)	Project Coordination / Scientific Coordination	Notes
1.	April 7th, 2010	PPK-ITB	GIZ (TH), DS, HL, TWH	Project Coordination	Discussing Project Preparation
2.	April 12th, 2010	PPK-ITB	GIZ (TH), KLH (DH), DS	Project Coordination	Discussing Project Preparation
3.	April 22th, 2011	PPK-ITB	GIZ (TH), DS	Project Coordination	Discussing Project Preparation
4.	May 14th, 2010	PPK-ITB	DS, MSF, TWH, IS, AS, HL, OA, BS	Scientific Coordination / All sectors	Kick-off of team coordination
5.	May 17th, 2010	Paklim KLH	Head of BLH of Tarakan, KLH, GIZ (TH, CP, KP), DS	Project Coordination	Coordination meeting for 1st Public Consultation in Tarakan, discussing ToR and Agenda of the Public Consultation
6.	May 20th, 2010	Dep III, KLH	KLH, GIZ (TH, CP, KP), DS	Project Coordination	Final Preparation Meeting for the Public Consultation in Tarakan
7.	June 4th, 2010	ITB	DS, MSF, TWH, IS, AS, HL, OA, BS	Scientific Coordination / All sectors	Team coordination
8.	June 6th, 2010	Cigadung, Bandung	AS, RA, MSF	Scientific Coordination /Health	First coordination of the health experts
9.	June 12th, 2010	PPK-ITB	DS, HL, OA, AS, TWH, IS, ER	Scientific Coordination /All sectors	Discussing TOR
10	June 15th, 2010	Paklim KLH	GIZ (DB, HvL, TH, CP, KP), AusAID (DH, DM), KLH (DH)	Project Coordination	Coordination meeting between KLH, GIZ and AusAID discussing project implementation
11	June 22nd,, 2010	Paklim KLH	GIZ (TH,CP, KP), DS	Project Coordination	Progress Meeting
12	June 28th, 2010	PPK-ITB	GIZ (TH, CP) , KLH (DH), DS, TH, CP, AS, RA, IS, MSF, TWH, BS, OA, HL, R	Project and Scientific Coordination (All sectors)	Progress report with GTZ and KLH / Presentation for South Sumatra
13	July 2nd, 2010	PPK-ITB	MSF, HL	Scientific Coordination	Coordinating table of data needs

No.	Date	Place	Attendants (see below for abbreviations)	Project Coordination / Scientific Coordination	Notes
				(Coastal Sector)	
14	July 2nd, 2010	PPK-ITB	DS, HL, AS, TWH, IS, OA, R, MSF, ER RA	Scientific Coordination (All sectors)	Preparation for Public Consultation in South Sumatra
15	July 12th, 2010	PPK-ITB	GIZ (CP, KP), KLH (DH), DS, TWH, MSF, H, IS, ER, J, AS	Project and Scientific Coordination (All sectors)	Progress Meeting
16	July 20th, 2010	Teknik Lingkungan ITB	AS, RA, DS, HS, Dom	Scientific Coordination (Health, GIS)	Coordinating health experts with GIS expert and assistants
17	July 20th, 2010	PPK-ITB	HL, MSF, HS, ER,	Scientific Coordination (Coastal, GIS)	Coordinating coastal and GIS experts and assistants
18	July 22nd, 2010	PPK-ITB	DS, MSF, BS, TWH, R, ER	Scientific Coordination (Science basis, water, and agriculture)	Methodology and data
19	July 23rd, 2010	Paklim KLH	KLH (DH, YS), GIZ (CP,KP), DS	Project Coordination	Preparation meeting for Kick Off Workshop and Launching Lombok Study
20	July 26th, 2010	ITB Bookstore	MSF, R, ER	Scientific Coordination (Agriculture and GIS)	Data and methodology
21	July 29th, 2010	ITB	DS, MSF, AS	Scientific Coordination (Health)	Cross cutting of health
22	August 5th, 2010	PPK-ITB	DS, TWH, IS, OA, MSF, BS, MII	Scientific Coordination (Water) Science Basis	Coordinating water sector and science basis
23	August 16th, 2010	Teknik Lingkungan ITB	AS, MSF, RA	Scientific Coordination (Health)	Data and methodology
24	August 19th, 2010	PPK-ITB	GIZ (TH, KP), KLH (DH), FC, A, WS, MSF, DS, HL, BS, ER	Project Coordination	Discussing economy experts and scope of dynamic vulnerability with KLH and GTZ
25	August 24th, 2010	Wisma Geologi	DS, MSF, OA, BS	Scientific Coordination (Water)	Data and methodology
26	August 25th, 2010	PAKLIM	GIZ (TH, CP, K),	Project	Progress meeting /

No.	Date	Place	Attendants (see below for abbreviations)	Project Coordination / Scientific Coordination	Notes
		KLH	KLH (DH), DS, MSF	Coordination	Integration of DRR and CCA
27	August 27th, 2010	PPK-ITB	DS, HL, AS, TWH, IS, OA, BS, R, MSF	Scientific Coordination (All sectors)	Preparation for South Sumatra and survey
28	August 28th, 2010	PPK-ITB	DS, BS, MSF, AS	Scientific Coordination (All sectors)	Preparation for South Sumatra and Tarakan Survey
29	August 31st, 2010	PPK-ITB	MSF, BS, HL, DS, ER, HS	Scientific Coordination (Water and Coastal)	Discussing correlations between water and coastal sectors
30	September 5th, 2010	PPK-ITB	AS, DS, MSF, HL, TWH, R, OA, HS, ER, IS	Scientific Coordination (All sectors)	Progress, methodology
31	September 23rd, 2010	PPK-ITB	DS, MSF, R, H	Scientific Coordination (Agriculture)	Methodology and data
32	September 24th, 2010	PPK-ITB	DS, R, MSF, ER, OA, IS, MII, MR, AS's assistant, Buff	Scientific Coordination (All sectors)	Progress and survey preparation
33	September 28th, 2010	OA's office	TWH, OA, MSF, BS, MII	Scientific Coordination (Science basis and water)	Data and survey
34	October 4th, 2010	PPK-ITB	R, MSF, AS, ER, DS, OA, IS, HL, TWH, J	Scientific Coordination (All sectors)	Progress and survey preparation
35	October 6th, 2010	KLH	DS, MSF, KLH	Project Coordination	Progress and survey preparation for South Sumatra
36	October 8th, 2010	PPK-ITB	DS, RA, AS, MSF	Scientific Coordination (Health)	Tarakan survey results
37	October 8th, 2010	CCC-ITB	R, DS, MSF, AS, HS	Scientific Coordination (All sectors)	Preparation to South Sumatra
38	October 12th, 2010	Park Hotel	GIZ (TH, CP, KP), KLH (ER, YS,YK, AW, HS, KW), DS, MSF	Project Coordination	Update Meeting of the Project with the new structure of KLH for adaptation division
39	October 19th, 2010	ITB Bookstore	AS, RA, MSF, DS	Scientific Coordination (Health)	South Sumatra survey results
40	October 20th, 2010	CCC-ITB	R, MSF, DS	Scientific Coordination (Agriculture)	South Sumatra survey results

No.	Date	Place	Attendants (see below for abbreviations)	Project Coordination / Scientific Coordination	Notes
41	October 22nd, 2010	CCC-ITB	AS, DS, TWH, MSF, ER, BS, MII, HS, MR, Buff	Scientific Coordination (All sectors)	Tarakan survey results
42	October 24th, 2010	Wisma Geologi	DS, OA, MII, ER, BS, MSF	Scientific Coordination (Water)	Progress and survey results of South Sumatra
43	October 29th, 2010	PPK-ITB	MSF, BS, IS, TWH, HL, DS, TH, AS, R, HL, J, HS, ER	Scientific Coordination (All sectors)	South Sumatra survey results
44	November 2nd, 2010	CCC-ITB	DS, MSF, AS, RA, AS's assistant	Scientific Coordination (Health)	Progress for Tarakan and preparation for interim report
45	November 3rd, 2010	PPK-ITB	MSF, DS, HL, WS, Buff	Scientific Coordination (Coastal)	Progress for Tarakan and preparation for interim report
46	November 3rd, 2010	Wisma Geologi	DS, MSF, OA, ER, MII	Scientific Coordination (Water)	Progress for Tarakan and preparation for interim report
47	November 4th, 2010	CCC-ITB	DS, MSF, WS, Buff	Scientific Coordination (GIS and Dynamic Vulnerability)	GIS data availability for dynamic vulnerability
48	November 5th, 2010	CCC-ITB	DS, MSF, WS, OA, TWH, MR, ER, Buff, AS	Scientific Coordination (All sectors)	Progress for Tarakan and preparation for interim report
49	November 8th, 2010	CCC-ITB	MSF, R	Scientific Coordination (Agriculture)	Progress for South Sumatra and preparation for interim report
50	November 9th, 2010	KLH	GIZ (HvL, TH, CP), KLH (YS), AusAID (DM), DS, IS, MSF	Project Coordination	Meeting with AusAID-CSIRO for NTB study
51	November 11th, 2010	CCC-ITB	R, H, DS, MSF, WS, ER, MR	Scientific Coordination (Agriculture, dyn. Vulnera-bility, GIS)	Cross cutting agriculture and GIS
52	November 16th, 2010	PPK-ITB	MSF, WS, HS, ER, Dom, Buff	Scientific Coordination (Dynamic vulnerability, GIS)	Cross cutting dynamic vulnerability and GIS
53	November 16th, 2010	KLH	GIZ (TH, CP, KP), KLH (ER, YS,YK, AW, HS, KW), DS, MSF	Project Coordination	Overview of Project activities and next steps / Preparation meeting for Climate

No.	Date	Place	Attendants (see below for abbreviations)	Project Coordination / Scientific Coordination	Notes
					Change Dissemination in Kota Malang
54	November 22nd, 2010	Beverly Hills	GIZ (TH, KP, RR),DS, MSF, WS	Project Coordination	Discussing Malang/ Solo for the third assessment
55	November 26th, 2010	CCC-ITB	DS, MSF, AS, R, MR, HS, WS, OA, BS	Scientific Coordination (Science basis, water, and agriculture)	Cross cutting climate projection with related sectors
56	December 2nd, 2010	CCC-ITB	MR, MSF, DS, H, R, WS's assistant	Scientific Coordination (agriculture, dynamic vulnerability, science basis)	Discussing methodology and GIS needs
57	December 2nd, 2010	CCC-ITB	Buff, MSF, IS, HL, BS, WS's assistant, DS, OA, ER	Scientific Coordination (Coastal, water, GIS, dynamic vulnerability)	Cross cutting issues
58	December 3rd, 2010	TL-ITB	DS, MSF, AS, RA	Scientific Coordination (Health)	Interim report revision
59	December 8th, 2010	Bookstore ITB	MSF, WS	Scientific Coordination (Dynamic vulnerability)	Discussing mainstreaming options
60	December 8th, 2010	PPK-ITB	MSF, WS, HS, Dom, Buff	Scientific Coordination, dynamic vulnerability, GIS	Data standardization
61	December 9th, 2010	Gajah Mada Hotel, Kota Malang	KLH, Malang Raya Local Government (Kota Malang, Kabupaten Malang, Kota Batu), GIZ, GIZ Paklim comp 2	Project Coordination	Dissemination of Climate Change in Malang Raya, Explanantion of the project, general explanantion of project implementation and the objective.
62	December 11th, 2010	Medicine Faculty Unpad	MSF, RA, DS	Scientific Coordination,, health	Health modeling

No.	Date	Place	Attendants (see below for abbreviations)	Project Coordination / Scientific Coordination	Notes
63	December 11th, 2010	Wisma Geologi	MSF, OA, ER	Scientific Coordination, (water, GIS)	Report translation and modeling
64	December 12th, 2010	RA's house	MSF, RA, DS	Scientific Coordination,, (Health)	Data and reporting
65	December 14th, 2010	Medicine Faculty Unpad	MSF, RA, DS	Scientific Coordination,, (Health)	Data, methodology, report
66	December 15th, 2010	Meteo-rology ITB	MSF, IS, TWH	Scientific Coordination, (Science basis)	Report, issue, and sector's needs
67	December 15th, 2010	PPK-ITB	MSF, IS, HL, HS	Scientific Coordination, (Science basis, GIS)	Crosscutting issues
68	December 16th, 2010	CCC-ITB	MSF, R	Scientific Coordination, (Agriculture)	Methodology
69	December 16th, 2010	PPK-ITB	MSF, HS	Scientific Coordination, (GIS)	Problems on mapping
70	December 18th, 2010	Medicine Faculty Unpad	MSF, DS, RA	Scientific Coordination, (Health)	Progress meeting preparation
71	December 29th, 2010	Bookstore ITB	MSF, DS, WS	Coordination, dynamic vulnerability	Indicators
72	December 31st, 2010	PPK-ITB	MSF, HL, HS	Scientific Coordination, (Coastal, GIS)	Hazard and other problems
73	January 4th, 2011	TL-ITB	AS, MSF, DS, HS, RA, Buff	Scientific Coordination, (Health, GIS)	Hazard and data problems
74	January 4th, 2011	Wisma Geologi	ER, MSF, OA, WS, DS	Scientific Coordination, (Water, GIS, dynamic vulnerability)	Hazard, vulnerability, and data availability
75	January 5th, 2011	PPK-ITB	HL, DS, WS, Buff, HS, MSF, ER	Scientific Coordination, (Coastal, dynamic vulnerability, GIS)	Hazard, vulnerability, and data availability
76	January 6th, 2011	TL-ITB	MSF, AS, RA	Scientific Coordination (Health)	Hazard and other problems

No.	Date	Place	Attendants (see below for abbreviations)	Project Coordination / Scientific Coordination	Notes
77	January 6th, 2011	MA-ITB	MSF, AS	Scientific Coordination, (Health)	Methodology and data processing
78	January 7th, 2011	Bookstore ITB	MFS, DS, WS	Scientific Coordination, dynamic vulnerability	Vulnerability Indicators and Spatial Plan
79	January 7th, 2011	Wisma Geologi	ER, MSF, OA, WS, DS, BS, MII	Scientific Coordination, (Dynamic vulnerability, water)	Vulnerability Indicators
80	January 11th, 2011	CCC-ITB	MFS, HS, ER	Scientific Coordination, (GIS)	Data and progress
81	January 11th, 2011	Istiqomah, Bandung	MSF, R	Scientific Coordination (Agriculture)	Progress of Agriculture
82	January 11th, 2011	Wisma Geologi	MII, OA, MSF, ER, DS	Scientific Coordination, (Water)	Vulnerability Indicators
83	January 13th, 2011	TL-ITB	MSF, AS	Scientific Coordination, (Health)	Vulnerability Indicators
84	January 16th, 2011	Wisma Geologi	DS, MSF, OA, BS, MII, ER	Scientific Coordination,(Water, GIS)	Hazard modeling, vulnerability indicators
85	January 18th, 2011	TL-ITB	MSF, AS, RA, Buff, WS	Scientific Coordination,(Health, GIS)	Hazard modeling, vulnerability indicators
86	January 18th, 2011	PL-ITB	DS, MSF, WS	Scientific Coordination,(Vulnerability)	Vulnerability of sectors, design of second public consultation Tarakan
87	January 19th, 2011	PPK-ITB	DS, MSF, BS, ER, WS	Scientific Coordination,(Water)	Hazard modeling, vulnerability
88	January 19th, 2011	PPK-ITB	DS, MSF, AS, RA, Buff, WS	Scientific Coordination, (Health)	Hazard modeling, vulnerability indicators
89	January 19th, 2011	PPK-ITB	DS, MSF, HL, IS, HS, WS	Scientific Coordination,(Coastal)	Hazard analysis, vulnerability analysis
90	January 20th, 2011	Badan Geologi	MSF, OA, BS, MII, ER, WS	Scientific Coordination,(Water)	Vulnerability indicators
91	February 1st, 2011	Swiss Bel Hotel, Tarakan	GIZ (TH), KLH (HS)	Project Coordination	Overview of Project Activities / Next Steps

No.	Date	Place	Attendants (see below for abbreviations)	Project Coordination / Scientific Coordination	Notes
92	February 7th, 2011	Ambhara Hotel, Jakarta	KLH, GIZ, BLH Kota malang, Bappeda Kota Malang, Bappeda Kota Batu, Bappeda Kabupaten Malang, BLH Kabupaten Malang	Project Coordination	Meeting for Implementing VA Project in Malang Raya, discussion for form of cooperation
93	February 8th, 2011	Beverly Hills Hotel, Bandung	GIZ (TH, CP, RR, KP), DS, MFS, WS	Project Coordination	Preparation meeting and discussion for Tarakan Spatial Planning meeting and setting up ToR for Malang Raya Study
94	February 16th, 2011	Beverly Hills Hotel, Bandung	GIZ (TH, RR, KP), KLH, BLH Kota Tarakan, Bappeda Kota Tarakan, Spatial Plan Team of Kota Tarakan, Local Government of Kota Tarakan	Project Coordination	Integrating study's result into spatial planning document of Tarakan Municipality
95	February 21st, 2011	Paklim KLH	GIZ (TH, CP, RR, KP), DS, MFS	Project Coordination	Coordination meeting for Yearly project workplan, budget, progress and Preparation meeting for 2nd Public Consultation in South Sumatera, Palembang
96	March 16th, 2011	Bappeda South Sumatera Province	Local Government of South Sumatera, GIZ (TH, CP, KP), KLH (HW, YK, AW), AusAID (Amritha)	Project Coordination	Integrating CRAA study into South Sumatera spatial plan, data and information collection and sharing
97	March 17th, 2011	PL-ITB	MSF, DS, WS	Scientific Coordination, (Dynamic vulnerability)	Upcoming Integration activities in the area of Dynamic Vulnerability
99	March 20th, 2011	Wisma Geologi	MSF, DS, OA, MII, ER	Scientific Coordination (Water)	Finalizing Sumsel study and preparation for Malang Workshop
100	March 21st, 2011	CCC-ITB	MSF, DS, AS, RA, WS	Scientific Coordination (Dynamic Vulnerability, Health)	Finalizing Sumsel study and preparation for Malang Workshop
101	March 22nd, 2011	CCC-ITB	BS, MSF, DS, ER	Scientific	Finalizing Sumsel

No.	Date	Place	Attendants (see below for abbreviations)	Project Coordination / Scientific Coordination	Notes
				Coordination (Water, GIS)	study and preparation for Malang Workshop
102	March 23rd, 2011	CCC-ITB	R, MSF	Scientific Project Coordination (Agriculture)	Finalizing Sumsel study and preparation for Malang Workshop
103	March 23rd, 2011	Meteorology ITB	MSF, DS, TWH	Scientific Coordination, (Science basis, Climate)	Preparing data needed for Malang study
104	March 25th, 2011	CCC-ITB	MSF, DS, AS, RA, TWH, MR, IS	Scientific Coordination (Health, science basis)	Finalizing Sumsel and Tarakan study and preparation for Malang Workshop
105	March 27th, 2011	Wisma Geologi	OA, DS, MII, ER, BS	Scientific Coordination (Water)	Finalizing Sumsel and Tarakan study and preparation for Malang Workshop
107	April 1st, 2011	PPK-ITB	DS, MSF, HL, HS	Scientific Coordination (Coastal)	Finalizing Sumsel and Tarakan study
108	April 3rd, 2011	Wisma Geologi	DS, MSF, OA, MII	Scientific Coordination (Water)	Preparing for Malang workshop
109	April 4th, 2011	CCC-ITB	DS, MSF, OA, MII, ER, HS, WS	Scientific Coordination (GIS, Dynamic Vulnerability)	Finalizing Tarakan study
111	April 5th, 2011	CCC-ITB	DS, RA, AS, WS	Scientific Coordination, (Health, Dynamic Vulnerability)	Finalizing Tarakan study and preparing for Malang workshop

1.6 Members of the Team and Abbreviations

Team	Name	Tasks
KLH	Emma Rachmawaty (ER)	Overall Coordinator
	Dadang Hilman (DH)	Overall Coordinator
	Haneda Srimulyanto (HS)	Overall Coordinator
	Yani Kusmulyani (YK)	Staff
	Astutie Widyarissantie (AW)	Staff
	Yulia Suryanti (YS)	Staff

	Koko winajarto (KW)	Staff
GIZ	Dieter Brulez (DB)	Principal Advisor
	Heiner von Luepke (HvL)	Senior Advisor
	Tilman Hertz (TH)	Advisor
	Chandra Panjiwibowo (CP)	Coordinator
	Rama Ruchyama (RR)	Financial officer
	Kathryn Pasaribu (KP)	Staff
Scientific Coordination (GIZ)	Djoko S. A Suroso (DS)	Scientific Coordinator
	M. S. Fitriyanto (MSF)	Assistant o Scientific Coordinator
Science Basis: Climate Projection (GIZ)	Tri Wahyu Hadi (TWH)	Expert
	Muh. Ridho (MR)	Assistant
	Junnaedhi (J)	Assistant
Science Basis: Sea-Level Projection (GIZ)	Ibnu Sofian (IS)	Expert
	Habib Sugianto (HS)	Assistant
Water (GIZ)	Oman Abdurahman (OA)	Expert
	Budhi Setiawan (BS)	Expert
	Munib Ikhwatul Iman (MII)	Assistant
	Norma Puspita (NP)	Assistant
Coastal (GIZ)	Hamzah Latief (HL)	Expert
	Haris Sunendar (HS)	Assistant
	Dominic Oki Ismoyo (Dom)	Assistant
Health (GIZ)	Asep Sofyan (AS)	Expert
	Ridad Agoes (RA)	Expert
Agriculture (GIZ)	Ruminta (R)	Expert
	Handoko (H)	Expert
GIS (GIZ)	Edi Riawan (ER)	Assistant
	Ardityo D (Buff)	Assistant
Dynamic vulnerability (GIZ)	Wilmar Salim (WS)	Expert
Field Assistants (GIZ)	Hendra Julianto (HJ)	Field Assistant Tarakan
	Ambiyar Setiojati (Am)	Field Assistant South Sumatra

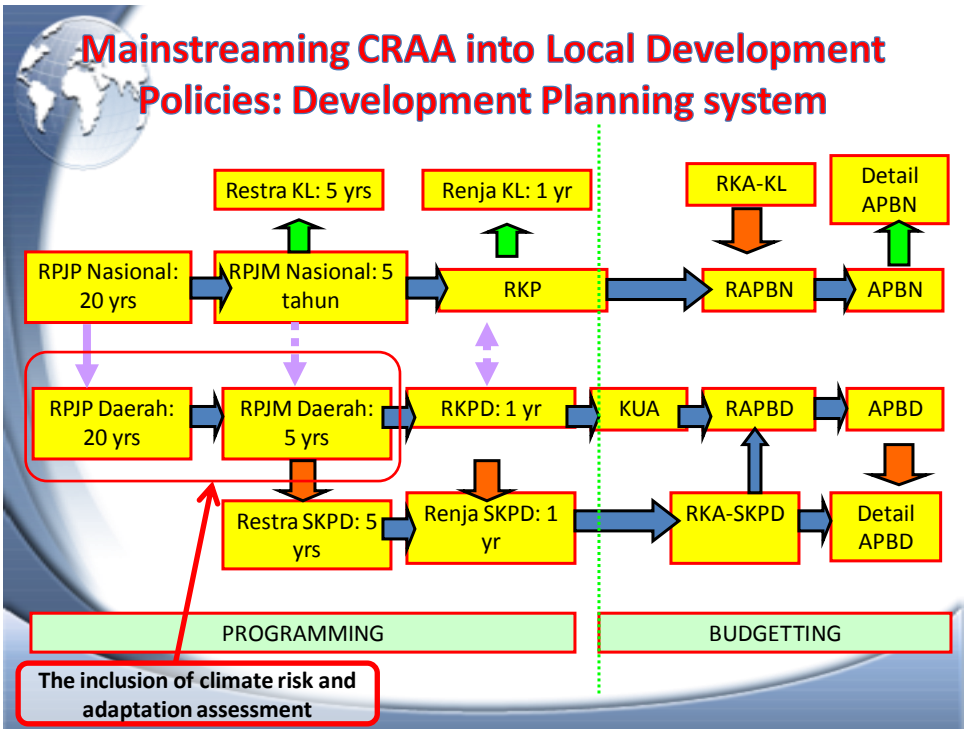
ANNEX 2 : Distinction between Macro, Meso and Micro Appropaches

Scale level	Size of study region	Planning level	Accuracy	Examples
Macro	**National**	**Adaptation policy**	**Low**	**ICCSR (2010), CIGRASP (2010)**
Meso	**Regional (Province to Kabupaten)**	**Adaptation strategies**	**Middle**	**Lombok Assessment (2009)**
Micro	**Local**	**Adaptation measures**	**High**	**Semarang (2010)**

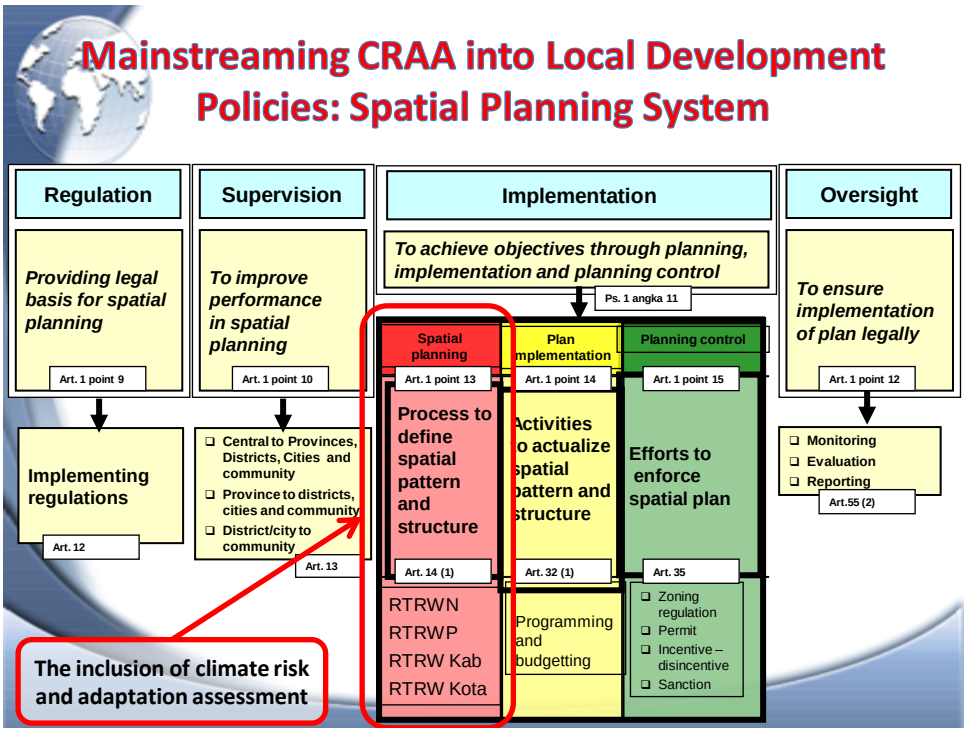
Source: modified from Messner, 2005

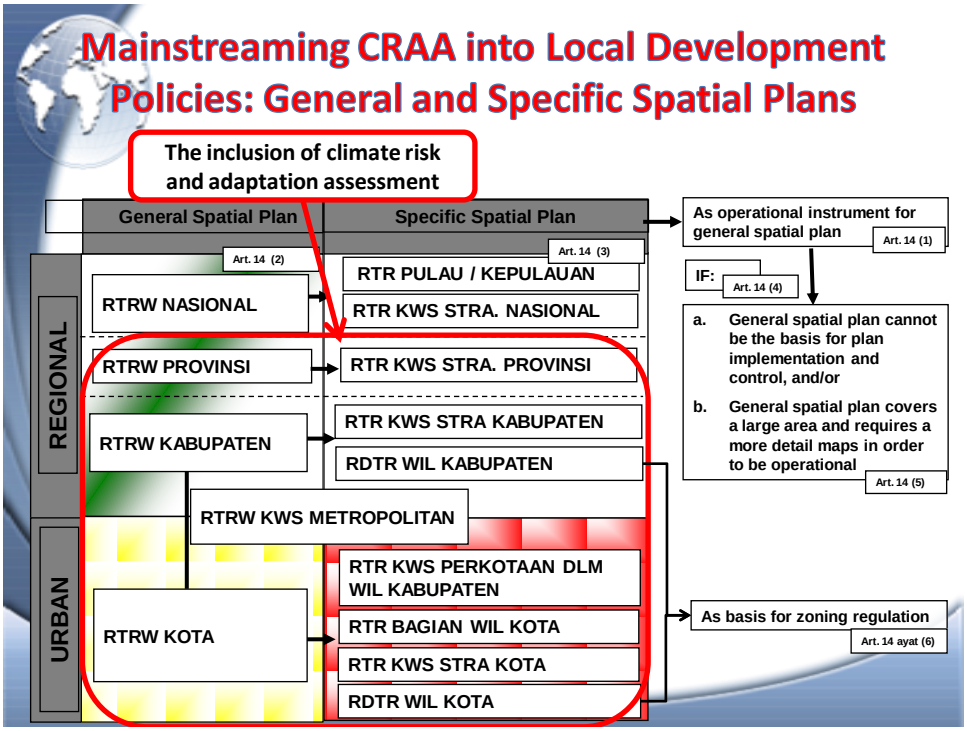
ANNEX 3: Framework for mainstreaming Climate Change into spatial- and development planning

3.1. Development Planning System



3.2 Spatial Planning System




Mainstreaming CRAA into Local Development Policies: General and Specific Spatial Plans
The inclusion of climate risk and adaptation assessment
General Spatial Plan
Specific Spatial Plan
Art. 14 (2)
Art. 14 (3)
REGIONAL
URBAN
RTRW NASIONAL
RTR PULAU / KEPULAUAN
RTR KWS STRA. NASIONAL
RTRW PROVINSI
RTR KWS STRA. PROVINSI
RTRW KABUPATEN
RTR KWS STRA KABUPATEN
RDTR WIL KABUPATEN
RTRW KWS METROPOLITAN
RTR KWS PERKOTAAN DLM WIL KABUPATEN
RTRW KOTA
RTR BAGIAN WIL KOTA
RTR KWS STRA KOTA
RDTR WIL KOTA
As operational instrument for general spatial plan
Art. 14 (1)
IF:
Art. 14 (4)
a. General spatial plan cannot be the basis for plan implementation and control, and/or
b. General spatial plan covers a large area and requires a more detail maps in order to be operational
Art. 14 (5)
As basis for zoning regulation
Art. 14 ayat (6)

ANNEX 4: Inputs to Spatial Planning (RTRW) of Tarakan: the case of the Coastal Sector[1]

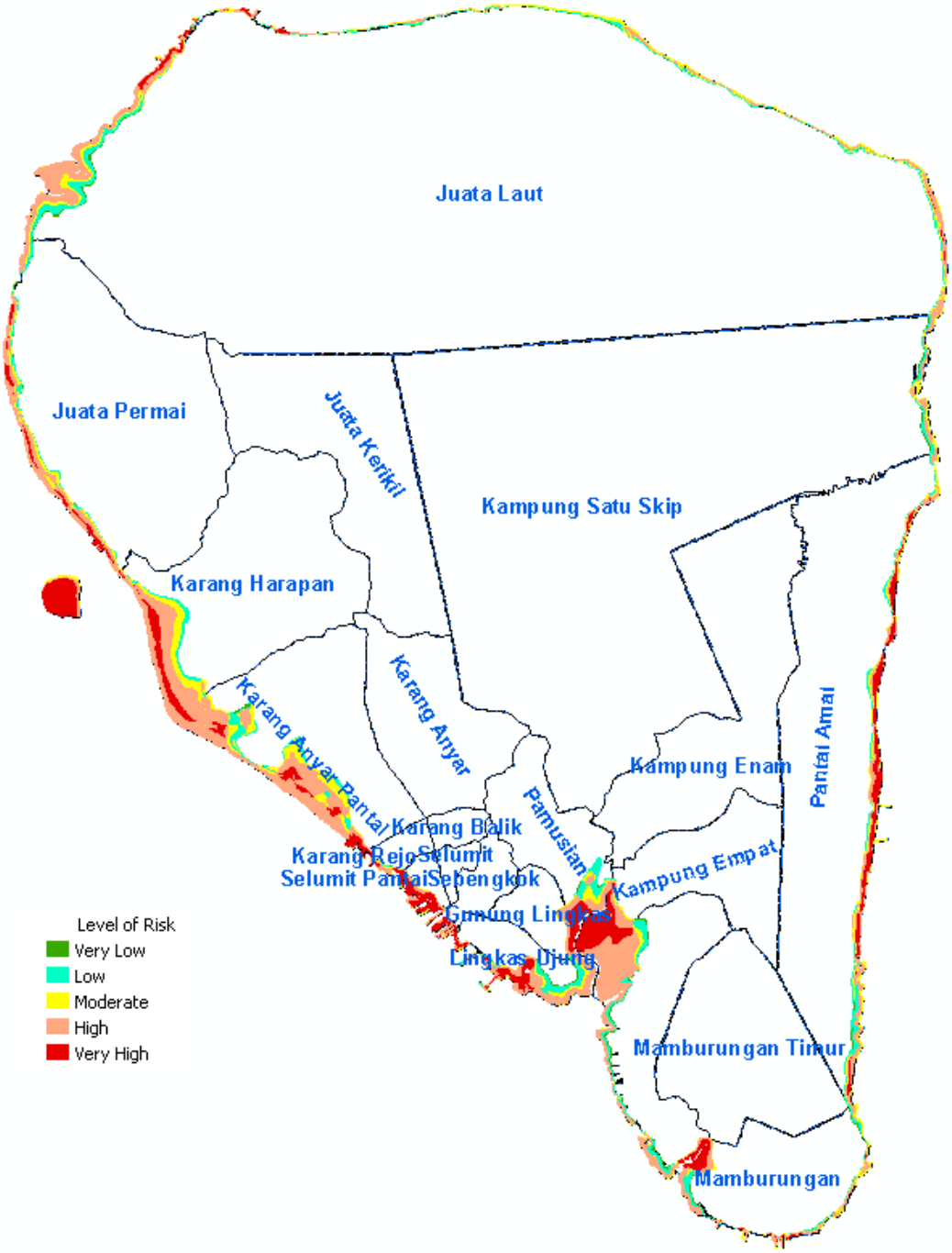


Figure 1. 2030 Climate Change Impact Risk on the Coastal Sector with Hazard Scenario 3

[1] This Annex provides an example for the impacts on the Coastal Sector only. Hazards considered on the coastal areas are seal level rise, tides, waves, La Nina and surges. The Water Sector, Health Sector and Agricultural Sector have produced similar maps that can be delivered upon request.

Figure 2. Overlay of 2030 Spatial Plan and 2030 Climate Change Impact Risk on the Coastal Sector

Sub-chapter 6.2 of the General Spatial Plan for Tarakan has been added with:

The consideration of the spatial plan of Tarakan, by comparing 2030 spatial map with 2030 map of climate change impact risk, shows that several land use in the coastal areas, conservation areas and cultured areas, are facing the risk of inundation if extreme weather and sea level rise happen. Estimated inundation areas are based on both maps and show high risk and very high risk for all sub-districts of Tarakan, such as:

- Kec. Tarakan Barat: city forests, mangrove forests, Juata Airport, Industrial areas, `military areas, tourism areas, moderate population areas, and high population areas.

- Kec. Tarakan Tengah: city forests, mangrove forests, Industrial areas, military areas, mining areas, moderate population areas, and high population areas.
- Kec. Tarakan Timur: city forests, mangrove forests, Industrial areas, military areas, tourism areas, fishery areas, moderate population areas, and high population areas.
- Kec. Tarakan Utara: mangrove forests, Industrial areas, tourism areas, and moderate population areas.

In these high risk and very high risk inundation areas are several high and moderately populated areas, cultured areas as well as industrial areas. Thus, the implementation of spatial plans of Tarakan needs to carefully consider these risky areas.

The suggested program and activities in the implementation of spatial plan of Tarakan by considering the impact of climate change are:

1. Integration of detailed spatial plan, RDTR and Zoning Regulations, with the results of climate change impact risk assessment.
2. Delineation and declaration of high risk level areas of climate change impact.
3. Climate change adaptation in the areas facing climate change impact, such as the protection of coastal areas with sea wall and green belt or retreatment of developed coastal areas.