



Climate Change, Mitigation, and Adaptation - Training of Trainers

Tailor made course for employees of Badan Meteorologi, Klimatologi dan Geofisika (BMKG)

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Tailor made course for employees of the Indonesia's state agency for Meteorology, Climatology, and Geo-physics - Badan Meteorologi, Klimatologi, dan Geofisika (BMKG)

A. Schrevel

Alterra report 2205

Alterra, part of Wageningen UR Wageningen, 2011

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BMKG, Indonesia's state agency for meteorology, climatology, and geo-physics, needed its staff to be trained in the theory and practice of climate change. A four week course was organised by Alterra, Wageningen, the Netherlands. The course was made possible with a financial contribution of NESO-Indonesia. The course dealt with the topics, basics of climate change, modelling, climate change in Southeast Asia and Indonesia, impacts (including socio-economic), and adaptation. The course also featured a training of trainers component.

Keywords: international training, climate change, modelling, climate change impacts, adaptation to climate change

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Alterra report 2205

Wageningen, July 2011

Contents

Prefa	ace	7	
Basi	c Data	9	
1	Summ	ary	11
2	Implen	nentation of training activities	13
3	Analys	is of results	21
4	Conclu	sions and recommendations	25
5	Staten	nents	27
Appe	endix 1	The curriculum of the tailor-made training Climate Change, Mitigation and Adaptation - Training of Trainers	29
Appe	endix 2	List of participants	35
Appe	endix 3	The Logical Framework and assessments of actions and verifications	37
Anna	andiv 4	Results evaluation NESC Indonesia among participants RKMG	11

Preface

The Course Coordinator wishes to thank NESO-Indonesia for having made this course possible, BMKG for having been such a great institute to work with, and the partners who helped implementing the training for their much appreciated contributions. All involved helped to create a very pleasant atmosphere, which helped much to ensure the success of the training.

Basic Data

Title of training	Climate Change, Mitigation a	nd Adaptation - Training of Trainers
Requesting Organization	BMKG	Badan Meteorologi, Kimatologi dan Geofisika Agency of Meteorology, Climatology and Geo-physics
Contact person	Dr. Edvin Aldrian	Staff of the Centre for Climate Change and Air Quality
Number of staff trained	19	
Providing institution	Alterra	Institute within the legal entity Stichting Dienst Landbouwkundig Onderzoek, Wageningen UR
Contact person	Dr. A. Schrevel	Senior Researcher
	aart.schrevel@wur.nl	
Location of the training course	Alterra, Wageningen UR, Wag	geningen, the Netherlands
Start and finish dates	2-27 May 2011	
Duration of the training course	4 weeks	

Alterra report 2205

9

1 Summary

In the month of May 2011, 19 employees of BMKG stayed at Wageningen to be trained in the theory and practice of climate change. The tailor-made training was organized by Alterra, part of Wageningen UR, and was made possible because of a financial contribution from NESO-Indonesia.

BMKG stands for Badan Meteorologi, Klimatologi dan Geofisika; BMKG is Indonesia's main institute on meteorology, climatology and geo-physics. It is organized as a state agency and is based in Jakarta, with subsidiaries all over Indonesia. In 2010, BMKG, the Requesting Organization, issued a request to NESO-Indonesia for a tailor made training on climate change, mitigation and adaptation. The request was evaluated favourably and following the appropriate procedures, Alterra was selected as the providing organization (henceforth, the Providing Institution). Alterra is the research institute for our green living environment. It is part of Wageningen UR, and it is based in Wageningen, the Netherlands. In implementing the tailor made training, Alterra cooperated with the Centre for Development Innovation (CDI), also part of Wageningen UR, and with two other Netherlands-based institutes, Deltares and KNMI.

The focus of the training was on two aspects: climate change theory, and the practice of mitigation and adaptation (the technical component); and dissemination of climate change information to users of such information (the training of trainers component). All participants were offered technical information on the different aspects of climate change. Usually in the afternoons, the participants worked in two groups: Group A received more in-depth information on climate change or worked at exercises, and group B was trained to become trainers in climate change issues.

In an anonymous online evaluation organized by the Providing Institution, 11 (out of 19) participants rated the course as 'excellent'; the other 8 rated it 'good'. Moreover, 100% of the participants expressed that they would appreciate a follow-up course. Also, 100% of the participants indicated that they would recommend the course to their colleagues, in case the course would be offered again.

A total of fifteen lecturers were contacted to provide training. Five of them worked regularly with the participants, the others were invited because of their specialization and provided trainings of usually a half day. The lecturers were unanimously very pleased with the level of commitment and the attitude of the participants, who all showed a keen interest in the subjects taught. The participants worked intensively for four weeks, until the very last day of the course.

Alterra report 2205

2 Implementation of training activities

Preparation

In the request for training, BMKG indicated it needed a training on the technical aspects of climate change, as well as on skill development in the field of curriculum development and dissemination of information. The latter need was required because BMKG wanted the participants of the training to disseminate the acquired knowledge to their colleagues when back in Indonesia. Following the necessary steps of the procedure, Alterra, part of Wageningen UR, was selected to provide the training. Alterra developed the curriculum of the tailor-made training in close cooperation with BMKG. The curriculum of the tailor-made training distinguished between these two dimensions of the training: it allowed participants to specialize in either the technical aspects of climate change (Group A) or the training of trainers aspects (Group B). The location of the training was determined to be Wageningen, the home town of Alterra, and the dates for the training were set at 2-27 May 2011. This report describes the tailor-made training and how it was implemented.

The tailor-made training Climate Change, Mitigation and Adaptation - Training of Trainers took place according to plan from 2 till 27 May 2011. The training took place at the Hof van Wageningen, Wageningen, the Netherlands, again according to the original planning.

The Providing Institution was responsible for the overall coordination of the course, and had assigned a Course Coordinator to take care of all aspects related to the course. The Course Coordinator had frequent contacts with BMKG prior to the training proper, to discuss the curriculum of the tailor-made course and other details, including the selection of the participants to the course. For that purpose the Course Coordinator travelled to Jakarta to meet with BMKG at the latter's headquarters. During this visit interviews were held with prospective candidates for participation in the course. The visit took place in the month of January 2011. In the subsequent period up to the start of the course, the plans and schedules, including the curriculum, were further detailed and fine-tuned, until everything was ready to receive the participants and to deliver the training. During this period of preparation, the Course Coordinator also communicated on a frequent basis with the trainers. The partners of the Alterra in implementing the training were contracted for their services.

Alterra worked with the following partners to implement the training: the Centre for Development Innovation (CDI), Deltares, and KNMI. CDI is also part of the Wageningen UR group, and is specialized in providing trainings. Deltares and KNMI are two other Netherlands-based institutes. Deltares is the institute on delta issues. KNMI is the meteorological institute of the Netherlands; it is the counterpart organization of BMKG.

The Course Coordinator exchanged emails with several participant during the preparation phase about practical issues. The Providing Institution set up an online evaluation to assess the appreciation of the participants of the different aspects of the training. One question concerned the information available to the participants prior to departure to the Netherlands. All participants agreed that this was adequate to excellent.

Structure of the tailor-made training

As was explained above, the training provided an opportunity for the participants to specialize in either the technical aspects of climate change (Group A), or to develop their skills as trainers (Group B). All participants followed the general classes on climate change aspects, which were usually given in the mornings (the specialization classes took place in the afternoons.

The training course started with a block Basics of Climate Change, and continued with the blocks Modeling, Climate Change in Southeast Asia, and Adaptation. The topic mitigation was not discussed in a block of its own, but was integrated in the other blocks. Complementary to the classroom sessions were the excursions. Four excursions were organized, each exposing the participants to the practical implications of the theories discussed in the class at that moment in the course.

The combination of general and in-depth information apparently worked well, as can concluded from the answers of the participants in the evaluation: 100% answered that they agreed with the approach. Also all participants (100%) agreed with the division into two groups: Group A, which focused on technical aspects of climate change, and Group B, which was concerned with Training of Trainers aspects. And also all participants (100%) agreed that the combination of general and in-depth knowledge was alright.

The curriculum as it was implemented is given in Appendix 1. The table gives the blocks and the individual lectures that constitute the blocks

lectures that constitute	the blocks.
Basics of Climate Change	Introduction to climate change Glossary of climate change concepts Radiation balance Carbon cycle Greenhouse gases Earth system feedbacks Predictability vs. spatial and temporal scales Role of IPCC and UNFCCC Exercise with global data
Climate Change in Southeast Asia	Basics of climate change in Southeast Asia Monsoon dynamics ENSO variability Digitalized data time series meteorological parameters Indonesia (not being taught because the digitalized series were not available) Sea level rise and coastal impacts Watershed management and delta hydrology: the case of Jakarta CO2 emissions from peat lands in Indonesia CO2 policy Indonesia
Modeling	Modeling principles Types of models Characterizing models (climate sensitivity, etc.) Scenarios SRES and RCP Monthly, seasonal and decadal forecasting (seamless prediction) Uncertainties and the use of ensembles Statistical and dynamical downscaling Regional modeling (CORDEX initiative) Scenarios in policy studies
Servicing Stakeholders	General adaptation principles, flood and drought plans (replaced by stakeholder inventory participants) Climate change information for stakeholders, sectors Data needs by development projects Disseminating complex climate change information data to clients and the general public: case of Indonesia, data needs by sector (replaced by a systematic assessment with the participants how they would be able to use the material taught in their daily work)
Training of Trainers	Adult learning Learning process and the learning cycle Introduction to Action Planning Steps to develop and Action Plan Effective communication Participation and participatory learning Presentation skills Training of Trainers

The topics of the blocks and of the individual lectures were choses in such a way that the course would have a logical structure. In the online, post-training, evaluation set up by the Providing Institution, the participants were asked how they appreciated the flow of the course. 68% said that the flow was good, and 32% said that it was excellent.

The first day of the training was devoted to getting to know each other, agreeing on rules and other practical things, on an introduction to the subject of the course, and dividing the participants in Group A and Group B participants.

The program was concluded with the presentation of individual action plans for the participants working in Group A, and sub-group plans for the participants working in Group B. This was done on the Friday morning at the end of Week 4. This session was attended by several trainers and resulted in lively discussions. The participants showed that they had understood the technical information about climate change (note: a formal test to assess the internalization of provided information was not part of the curriculum); they also showed that they had picked up the skills of how to make presentations.

Part of the training is also the two-day post-training workshop in Jakarta. This workshop is meant to discuss with the participants how they apply the acquired knowledge in their work. This Final Report does not contain details on the implementation of this workshop, as the workshop takes place after the agreed deadline for submitting the Final Report.

Organization

The Course Coordinator had overall responsibility for the course. He also prepared the drafts and the subsequent versions of the curriculum. Each of the blocks was filled in by a first responsible person (see also above). During the course consultation took place between the trainers, first responsible persons of blocks, and the Course Coordinator to decide on last-minute issues or small adaptations to the program.

The participants selected one amongst themselves to act as Captain of the Week. In fact the Captain of the Week became the Captain of the Course, as the same person was elected each week. The function of the Captain of the Course was to act as the spokesmen of the participants in case of an issue that needed to be discussed. This happened at several occasions and included issues as prayer time (all participants are Muslim), and allowances. At times the Captain of the Week was asked by the Course Coordinator to convey messages to the group of participants. At the end of each week, the Course Coordinator and the Captain of the Week sat together to discuss any issue that needed attention. These meetings always took place in the best atmosphere.

It had been the intention to set up a Quality Assurance Team to supervise the course, especially the contents of the course. In the end the team did not materialize, mainly due to time pressure.

All logistics, including organization of transport to and from the national airport and to excursion sites, was taken care of by the logistics department of CDI. The participants were generally satisfied with the logistics of the course: 6 rated the logistics as 'adequate, 7 as 'good', and also 6 considered it 'excellent'. The Course Coordinator much appreciated the pleasant and professional way in which the many different details of the logistics of the course were organized.

The participants were provided with board and lodging in the conference centre Hof van Wageningen - this is also were the classes took place. Eleven participants (58%) said that the hotel rooms were good, four (21%) said they were good, and also four (21%) said that they were excellent. The overall facilities provided by Hof van Wageningen were considered good by fourteen participants (74%), excellent by four (21%), and adequate by one (5%). The opinions about the food were more diverse: two (11%) thought it was very poor, one (10%)

thought it was poor, six (32%) thought it was adequate, five (26%) said it was good, and one (5%) said it was excellent. All food was halal for Muslim people. All participants had 24-7 free internet access; this was reflected in their appreciation. All agreed that the internet facilities were good to excellent.

Implementation of the curriculum

Three lectures were not provided as originally planned. It was thought that the digitalized data on meteorological parameters of Indonesia (by KNMI) would be available in the course for discussion. However, this could not be realised. As a substitute the data series brought by the participants from their working stations were subjected to analyses and discussions. There were two fundamental shortcomings with these data sets: they (some) covered time spans of less than 30 years - the minimum length of period to draw statistical valid conclusions, and the (some) data series only presented precipitation data, and not also temperature. This limited the usefulness of the data series.

The general introduction to adaptation principles, including flood and drought plans, was not provided as a stand-alone subject, but was covered in the general introduction to climate change and adaptation to changing climates. The planned lecture on disseminating climate change information to stakeholders in Indonesia was replaced by a systematic evaluation with the participants of how they could apply the information provided to them in the previous weeks in their day-to-day work. This change in the program was considered appropriate because of two reasons. At this time in the curriculum, the participants had already been subjected to almost four weeks of training and the added value of yet another lecture was felt to be limited. And more importantly, both participants and the Providing Institution needed to reflect on the relevance of the information provided at the post-training stage. The Providing Institution needed to do this as a preparation for the follow-up workshop in Jakarta.

At several occasions the participants were asked to present the outcome of their exercise to the group at large. At other occasions they were asked to produce a poster showing their results. The trainers were often positively surprised by the level of skill shown in these products of the participants.

Different training methods were applied. Classroom lectures, combined with exercises, constituted the core of the training. The classroom lectures assumed the shape of lectures illustrated by power point presentations, information development in dialogue with the participants (questions followed by explanations), or a combination. Almost all trainers had developed an exercise of some sort, including going online to find information on the internet. Another example is the exercise to draw earth radiation balances. Participants repeatedly showed their appreciation of these exercises (not included in the formal evaluation). The participants worked on the exercises either individually or in groups, depending on the assignment. It is felt that the combination of classroom training, exercises, and excursions were important to the success of the training.

Excursions

To complement the classroom training and exercises, a number of excursions were organized (four in total). Each excursion was an illustration of the subject given at that moment in the course. Initially two excursions were planned. Later two were added, following the much-appreciated advice of the committee that evaluated the proposal.

The following excursions took place:

- to the Millingerwaard, an area were high water levels in the river Rhine are temporarily stored in a retention
 area that also has an ecosystem and nature protection function (an illustration of how to cope with high
 water levels in an environmental friendly way, in contrast to the usual approach to erect high dikes);
- to KNMI, BMKG's sister institute in the Netherlands (allowed participants to compare BMKG with its
 counterpart in the Netherlands); and to Gabauw, KNMI's center for measuring the full range of meteorological

parameters (served to show to the participants how climatological parameters are being measured in the Netherlands);

- · to Deltares and the Westland area in the West of the Netherlands (Deltares cooperates with BMKG);
- to Water Board Rijnland, responsible for land below sea level (participants were exposed to the work of
 water managers and regional planners at implementation level; they have to adapt their water management practices to changing climate conditions).



In the evaluation one participant commented that he/she would have preferred if the excursion to KNMI would have allowed for more insight into the day-to-day activities at the institute.

The trainers

A large number of specialists were asked to train in the course. This made it possible that the participants were given state-of-the art knowledge on the many different aspects of the complex subject of climate change.

Special mention needs to be made of Dr. Ronald Hutjes, Alterra, who filled in most of the lectures of the blocks Basics of Climate Change, and Modeling. Mrs. Dr. Ingrid Gevers and her colleague Ir. Froukje Gordijn, both from CDI, took care of the Training of Trainers component.

The following is a list of the trainers/lecturers, the blocks in which they featured, with information about their affiliation presented in the third column:

Alterra report 2205

Block	Name	Affiliation
Basics of Climate	Dr. R. Hutjes*	Alterra
	Dr. B. Kruyt	Alterra
	Dr. A. Schrevel	Alterra
Climate Change in Southeast Asia	Dr. A. Jeuken*	Deltares
	Ir. D. Dillingh	Deltares
	Dr. K. Heynert	Deltares
	Dr. K. Heynert	Deltares
	Dr. P. van der Meer	Alterra
	Ir. C. Verwer	Alterra
Modeling	Dr. R. Hutjes*	Alterra
	Prof. Dr. W. Hazeleger	KNMI, Wageningen UR
	Ir. W. Franssen	Alterra
Servicing Stakeholders	Dr. A. Schrevel*	Alterra
	Ir. F. Jaspers	Alterra
	Dr. A. Jeuken	Alterra
	Mrs. Dr. A. Bessembinder	KNMI
	Ir. R. Verminnen	Deltares
Training of Trainers	Mrs. Dr. I. Gevers*	CDI
	Mrs. Ir. F. Gordijn	CDI
Excursions	Dr. A. Schrevel*	Alterra
	Ir. D. Kern	Waterboard Rijnland
	Ir. S. de Jong	Provincie Zuid Holland
	Dr. L. Stuyt	Alterra
	Dr. P. Siegmund	KNMI
	Ir. J. Bessembinder	KNMI
* First responsible for the block		



The participants were generally satisfied with the performance of the trainers - the deliberate choice was made not to ask the participants to evaluate individual trainers. The presentations and directions were considered good or excellent by all participants, and with one exception, this was also true for the overall guidance of the learning process. Twelve participants (63%) said that the interaction with the trainers was excellent, six (32%) said it was good, and one (5%) said it was adequate. Indeed the Course Coordinator had made it a point to suggest to the trainers that they would be as interactive as possible during their lectures. Twelve participants (63%) rated the ability of the trainers to balance group needs and individual needs as good, and five (23%) even said it was excellent, with two person (10%) saying it was just good.

The participants

Altogether nineteen persons attended the course; all are employed by BMKG. At the last moment one of the participants had to withdraw, because of personal reasons. Zeven of the nineteen participants were women, twelve were men; nine were from the head office in Jakarta, the others came from one of the BMKG stations in the country. Appendix 2 presents the list of participants and gives information on the location of the working stations of the participants. The candidates were selected by the Providing Institution out of a list of prospective candidates presented by BMKG and following a series of interviews. Two candidates were suggested directly by BMKG.

The background of the participants was rather diverse, as was known that would be the case when the course was designed. The table below gives details about the professional background of the participants.

Meteorologist/Agro- meteorologist	9	
Environmentalist/Environmental Health Expert	2	
Chemist	3	
Physics Expert	1	
Engineer	2	
Agriculture Expert	1	
Science	1	



It is also concluded from the table that all participants were educated in one of the β -sciences. The majority of the participants were bachelors and a few had completed their masters. Two candidates were serious about obtaining their PhD, and had in fact taken important steps to realize that goal. One or two of the participants had a management function; the others were working as subject experts.

Although there were differences in the level of competence in English, all participants were able to follow the lessons and the participants could express themselves reasonably well (one or two), to very good (the majority) in English.

It was known beforehand that the background of the participants would be diverse. This necessitated choices with regard to the structure of the curriculum, as was explained above. The participants were asked whether the composition of the group bothered them. Except one (6%), they all (seventeen participants; 94%) said it did not bother them. One trainer stated that he would have preferred more time to work with Group A, as he felt that several participants in this group would have appreciated more in-depth information, discussions, and exercises on technical matters pertaining to climate change.

3 Analysis of results

Activities related the original training objectives

All activities that constituted the training were minutely prepared. The proposal and the curriculum were prepared in close cooperation with both BMKG and the core trainers. The logistics were outsourced to CDI, part of Wageningen UR. The preparatory activities were very important to the success of the training. It was felt that the need for improvising should be reduced to the absolute minimum, if the 20-odd participants to the course were to benefit maximally from the training. This strategy paid itself back. The course itself could be executed without any major changes to the original objectives and schedule.

The course was built up with teaching blocks - each block discussed a major issue, like basics of climate change, modelling, adaptation measures. This appeared to work well. It helped participants to understand the flow of the course, and trainers to place their material in a broader, but no too broad, context. Each block was supervised by one trainer, although the Course Coordinator was dominant in organising several of the blocks.

The participants were divided into two groups with foci on technical climate change information and training of trainer skills. This was done for two reasons. Prior to the start of the training it was known that the background and interest of the participants was different, with some preferring more hard-core technical training, and others favouring communication skills. Secondly, BMKG had indicated in their Request for Training that the participants to the tailor made training would have to disseminate the acquired information to their colleagues after the training. The division into two groups contributed to achieving the objectives of the training, as these asked for both staff upgrading and curriculum development.



The Proposal contains a Logical Framework, including performance indicators and sources of verification. The Logical Framework is used to assess the extent to which the activities in the training have contributed to achieving the training objectives. This is done in the table in Appendix 4. In the table, columns 1-4 are copied from the Proposal, whereas column 5 (in italic) gives details on the post-training assessment. Practically all the activities were implemented as originally planned.

Added value for BMKG

The tailor made course on Climate Change, Mitigation, and Adaptation - Training of Trainers was designed in order to assist BMKG to internalize state-of-the-art knowledge on climate change. This is expressed in the short term and longer term objectives of the training course, as formulated in the proposal for training:

The short term objective of the training is to transfer state-of-the-art knowledge to the BMKG participants on the issues of climate change, climate change mitigation and adaption and related subjects, in order to assist them to better perform their professional tasks. A further short term objective is to train a selection of the BMKG participants to become internal trainers on the issues of climate change, mitigation and adaptation.

The longer term objective is that BMKG will be able to perform its task in Indonesian society as the organization understanding and dealing with climate change, mitigation and adaptation¹.

As was also indicated in the Proposal, the tailor made training on Climate Change was a necessary, but not a sufficient condition for BMKG to become the main player in Indonesia on the issue of climate change. Other conditions needs to be fulfilled as well, including but not limited to, further strengthening the Centre for Climate Change and Air Quality, and developing active networks with similar institutes around the globe.

Alterra, in particular the Centre for Water and Climate, is among the leading institutes on climate change and related subjects. Undoubtedly the short term aim of transferring state of the art knowledge on climate change, mitigation and adaptation has been achieved. The core trainers were all recruited from the Centre for Water and Climate. At several occasions during the training deliberate steps were taken to assure that the material taught would be relevant to the work of the participants. The participants presented their work and their working stations in Week 1 of the training. They were asked to reflect on the relevance of the material taught later in the course, and together with the participants Action Plans were formulated that they could use to further develop their work after the training.

Half of the participants are of the opinion that the objectives were achieved well (47%), a third said that they were achieved excellently (32%), and a fifth that they were achieved adequately (21%). This can be compared with the personal expectations of the participants: 11 (60%) say that their expectations were met well, 6 (32%) said that their expectations were met adequately, and 2 (11%) stated that their expectations were met excellently. The overall conclusion from these figures is that the participants were generally served well with the training course (not one was critical or dissatisfied). The appreciation of the extent to which the objectives of the course are met would appear to be slightly higher than the appreciation of the extent to which the personal expectations were met - although this could also be a manifestation of the sensitivity of the evaluation outcome caused by the low number of entries.

95% of the participants said the course had helped them to understand the issue of climate change better to much better, 84% felt that it had improved their skills, again 95% said that their attitude had changed for the

¹ Other (training) inputs to the BMKG as an organization will be necessary to achieve this longer term objective.

better and that they had grown more confident with regard to the subject. Moreover, all participants (100%) indicated that they would recommend the course to their colleagues in case the training would be organized again. Also 100% said that they would appreciate to see a follow-up course organized.

To this may be added that, somewhat surprisingly, the participants were also generally positive about the duration of the course - 4 weeks. 60% said it was just right, two wanted it to be longer, and one even said it was far too short. Two said it was too long. The Providing Institution was interested in the participants' replies to this question, as at one stage during the preparation of the course it was thought that perhaps four weeks were too long. Not in the eyes of the participants, as it is concluded. The participants also said that a follow-up course, if it would take place, should last again four weeks (60%), although others said it should be less long. And that it should take place in the Netherlands: (16-18 out of 19 participants). The subjects to be taught would basically have to be the same as during the course in May, including also issues as impacts on physical systems, climate change an ecosystems, and climate change and socio-economic systems.

Lessons learned

The results of the formal evaluation, the comments from the participants as expressed in the evaluation, and the experience from the trainers and the Providing Parties lead to a number of lessons for the future. These are explained below.

- Participants indicated they prefer more non-training hours on Fridays, allowing them to adhere to their praying obligations.
- The Providing Institution had to be flexible in designing the curriculum of the training. BMKG could only
 express in general terms what was needed, which meant that the subject of climate change also was
 treated in its full width, rather than in its details. A follow-up course can be more specific on one or two
 core issues of climate change relevant for BMKG.
- The Providing Institution also had to be flexible in designing the curriculum because the background of the BMKG participants was so diverse. The choice in the curriculum that the participants could choose between two directions - in-depth exercises on climate change topics, or training of trainers building -worked well.
- At one point one of the trainers had to adjust his lessons because he was confronted with the whole group, whereas he had expected that he could work with those participants that were prepared to receive more detailed information on a specialist subject. This was caused by a conflict of agendas of another trainer (who announced not to be able to teach at a late moment). In cases like this the Course Coordinator should work out a solution that does not compromise the quality of the curriculum and discuss his solution with all involved.
- If participants are asked to bring data prior to departing from their work stations to participate in a course, it should be made more specific what data exactly they need to bring. This requires communication between the trainers of a specific subject and the Course Coordinator.
- The post-training workshop requires that all participants will convene in Jakarta. This is difficult to organize because of several reasons, including financial (there are no provisions in the budget for this).
- Question 15 of the evaluation form, concerning the interests of participants in subjects to be treated in follow-on courses, appeared to ambiguous. It needs to be reformulated in the next issue of the evaluation form.
- Outsourcing the logistics of the training to CDI appeared to be efficient.
- Although the Course Coordinator expected beforehand that 4 weeks would perhaps be too long to hold the
 attention of the participants, this appeared not to be the case. 17 out of the 19 participants indicated that
 four weeks was just right or too short.
- Splitting the course in a part in Indonesia and a part in the Netherlands will make the course more
 expensive to organize. It would also increase the environmental footprint of the course.
- In the comments section of the evaluation several participants indicated they would prefer to develop more skills on modeling and downscaling model data to their own regional situations.

4 Conclusions and recommendations

The tailor-made training on Climate Change, Mitigation, and Adaptation - Training of Trainers was implemented without almost any deviations as planned and described in the Proposal. Participants are positive about the training, as shown by the outcome of the online evaluation organised by the Providing Institution. Also the trainers are happy with the training, how it was organised and how it was structured. The trainers were also happy with the participants as a group. The training has produced the results as planned. It has contributed to BMKGs long term goal to become a dominant national and regional (Southeast Asian) centre on climate change. And it has contributed to the short term goal to make selected staff more familiar with the theory and practice of climate change, mitigation, and adaptation, and to the other short term goal to train staff to disseminate the knowledge as acquired in the tailor-made course to colleagues back home.

BMKG has set the first step into the direction of becoming the national and regional (Southeast Asian) centre on climate change. Other steps need to follow. These include training more of its staff in climate change issues along the lines of the tailor-made course described in this report, and training BMKG staff in depth in related issues. A priority topic would have to be climate change and agriculture. Many of the BMKG staff are working in rural areas and would benefit much from more expertise knowledge on the subject of climate change and agriculture.

5 Statements

These (signed) statements indicate that the both parties, Providing Institution and the Requesting Organization, have approved the report.

Wageningen, 30 June 2011 Jakarta, 26 July 2011

Ir. C.T. Slingerland Dr. Edvin Aldrian, B.Eng., M.Sc.

Director Alterra Director of the Center for Climate Change and Air Quality, BMKG

28

Appendix 1 The curriculum of the tailor-made training Climate Change, Mitigation and Adaptation - Training of Trainers

Climate Change, Mitigation and Adaptation training

WEEK 1					
Monday 2 May	Tuesday 3 May	Wednesday 4 May	Thursday 5 May	Friday 6 May	Saturday and Sunday
					7 and 8 May
8:30 - 09:30	9:00 - 12:30	9:00 - 12:30	9:00 - 12:30	9:00 - 12:30	Saturday: Keukenhof
Registration and course	Lecture	Exercise	Lecture	Exercise	(extra curriculum activity by
logistics	Basics of climate change:	System diagram of earth/climate	Basics of climate change:	Exercise with global data:	participants)
	radiation balance, carbon	system	feedbacks, ctd; predictability	observed climate change (where	
09:30 - 11:00	cycle, greenhouse gases,	Dr. Ronald Hutjes (Alterra),	vs spatial and temporal scales; to find data, e.g. CRU,	to find data, e.g. CRU,	Sunday: Excursion
Official opening	feedbacks	Dr. Bart Kruyt (Alterra)	role of IPCC and UNFCCC	Aphrodite, WATCH, how to	Amsterdam and Zaandam
	Dr. Ronald Hutjes (Alterra)		Dr. Ronald Hutjes (Alterra)	analyze)	
Introduction to the				Dr. Ronald Hutjes (Alterra)	
programme					
Dr. Aart Schrevel					
Ir. Femke Gordijn (CDI)					
Ir. Ingrid Gevers (CDI)					
11:00 - 12:30					
Introduction to					
Climate Change					
Dr. Aart Schrevel (Alterra)					
14:00 - 17:00	14:00 - 17:00	14:00 - 17:30	12:30 - late afternoon		
Expectations of the	Leaming	Action Planning and Poster	Excursion		
participants (learning	Adult learning	preparation	Visit to a river water retention		
objectives)	Learning process	Introduction to Action Planning	area - River Waal (Millingen)		
	Leaming cycle	Steps to develop and Action Plan	Dr. Aart Schrevel (Alterra)		
Curriculum development	Test learning styles	Preparation of poster on own cases			
Introduction to curriculum	Adult learning	studies based on pre-assignment			

WEEK 1					
Monday 2 May	Tuesday 3 May	Wednesday 4 May	Thursday 5 May	Friday 6 May	Saturday and Sunday 7 and 8 May
development	Ir. Femke Gordijn (CDI)	Ir. Femke Gordijn (Alterra)		15:30 - 17:30	
Competences (splitting group // Ir. Ingrid Gevers (CDI)	Ir. Ingrid Gevers (CDI)	Ir. Ingrid Gevers (Alterra)		Own case studies - poster	
in two sub-groups)				presentations	
Ir. Femke Gordijn (CDI),				Course participants + guests	
Ir. Ingrid Gevers (CDI)					
17.00	Tour to downtown Wageningen				
Informal drinks					

31

WEEK 2					
Monday 9 May	Tuesday 10 May	Wednesday 11 May	Thursday 12 May	Friday 13 May	Saturday and Sunday 14 and 15 May
08:30 - 11:00 Visit to campus Wageningen UR - Forum Building (library)	9:00 - 12:30 Excursion KNMI Introduction to KNMI (Royal Netherlands Meteorological Institute) KNMI Seismology Institute Dr. Peter Siegmund (KNMI)	9:00 - 12:30 Lecture Detecting/validating and predicting sealevel rise and coastal impacts Ir. Douwe Dillingh (Deltares)	9:00 - 12:30 Climate change, sea level rise, coastal protection, watershed management, delta hydrology: the case of Jakarta Dr. Karel Heynert (Deltares)	9:00 - 12:30 Lecture CO2 balance of the lowland peat areas, CO2 policy of Indonesia Dr. Peter van der Meer (Alterra)	
11:00 - 14:00 - 17:30 Lecture followed by exercise Basics of climate change in Southeast Asia, monsoon dynamics, ENSO variability, Data time series meteorological parameters Indonesia Dr. Ad Jeuken (Deltares) Dr. Ronald Hutjes (Alterra) Group B Communication Importance of effective communication (including active listening, questioning, probing and feedback) Using video for learning and reflection Ir. Fernke Gordijn (CDI), Ir. Ingrid Gevers (CDI)	14:00 - 17:30 Excursion Cabauw Climate of the past 100 years, the greenhouse effect, climate models, causes of climate change in past 100 years, climate in the next 100 years, KNMI Climate scenarios 2006 (KNMI staff)	14:00 - 17:30 C'nued Group B Participation Intro to participation Participatory learning Irene and Ingrid Group B 16:00 - 17:30 Design a short training Designing a short training Session by the participants Ir. Femke Gordijn (CDI).Ir. Ingrid Gevers (CDI)	C'nued C'nued C'nued Group B Practicing Presentation skills Present the training session Video used for reflection and feedbacking Participants Feedback Irene and Ingrid 17:00 - 17:30 Group B Curriculum Development Short intro to week 4 Ir. Femke Gordjin (CDI), Ir. Ingrid Gevers (CDI)	C'nued C'nued 14.00 - 17.00 Inventory Inventory stakeholder environment participants Dr. Aart Schrevel (Alterra), Ir. Fons Jaspers (Alterra)	

WEEK 3					
Monday 16 May	Tuesday 17 May	Wednesday 18 May	Thursday 19 May	Friday 20 May	Saturday and Sunday 21 and 22 May
9:00 - 12:30	9:00 - 12:30	9:00 - 12:30	9:00 - 12:30	9:00 - 12:30	
Lecture	Lecture	Lecture	Exercise	Excursion	
Modelling principles; types of	Monthly, seasonal and decadal	uncertainties and the use of	with monthly/seasonal	Delta Works	
models; characterising models	forecasting (seamless	ensembles; statistical and	forecasting data: where to find	Ir. Fons Jaspers (Altera),	
(climate sensitivity, etc.);	prediction)	dynamical downscaling; regional	data, how to analyze and	Staff Deltares	
scenarios SRES and RCP	Dr. Ronald Hutjes (Alterra),	modelling (CORDEX initiative	interpret		
Dr. Ronald Hutjes (Alterra)	Prof. Dr. Wilco Hazeleger	Dr. Ronald Hutjes (Alterra)	Dr. Ronald Hutjes (Alterra)		
	(Alterra, KNVMI)			-	
14:00 - 17:30	14:00 - 17:30	14:00 - 17:30			
Exercise	Exercise	Lecture			
IPCC models, skill assessment	skill assessment data, scenario	Scenarios in policy studies			
literature, finding data	analysis (based on Excell data	Dr. Ad Jeuken (Deltares)			
Dr. Ronald Hutjes (Alterra)	excerpts)				
	Dr. Ronald Hutjes (Alterra),				
	Ir. Wietse Franssen (Alterra)				

WEEK 4					
Monday 23 May	Tuesday 24 May	Wednesday 25 May	Thursday 26 May	Friday 27 May	Saturday 28 May
9:00 - 12:30	9:00 - 12:30	9:00 - 12:30	9:00 - 12:30	9:00 - 11:30	Travel home
Lecture	Lecture	Lecture	Lecture	Presentation of action	
General adaptation principles,	Climate change information for	Data needs by development	Disseminating complex climate	plans and training	
flood and drought plans	stakeholders, sectors	projects	change information data to	curricula in parallel	
Dr. Aart Schrevel (Alterra),	Dr. Anette Bessembinder (KNMI)	Dr. Marnix van der Vat (Deltares)	clients and the general public:	groups	
Ir. Fons Jaspers (Alterra)			case of Indonesia, data needs by	These plans are based on	
			sector	technical inputs provided	
			Dr. Aart Schrevel (Alterra),	during the entire course	
			Ir. Fons Jaspers (Alterra)	Ir. Femke Gordijn (CDI),	
				Ir. Ingrid Gevers (CDI),	
				others	
14:00 - 17:30	14:00 - 17:30	14:00 - 17:30	14:00 - 15:00	11:30 - 12:30	
V allow	Coursion	V airca	Croim A	Overall eveluation	
	Exculsion	v dno in	dioup.	Over all evaluation	
Action Plan development	Mini seminar: men of practice	Action Plan development	Action Plan development	CLOSURE	
Steps in Action planning	present how they deal with	Needs linked to BMKG goals and	Working on action plans:		
Ir. Femke Gordijn	climate change in practice,	objectives	Preparing presentations of action		
	followed by discussions with	Objective setting	plans		
	participants	Ir. Femke Gordijn	Ir. Femke Gordijn		
	Dr Aart Schrevel	•			
	L'Ent Comerci,				
	Ir. rons Jaspers Grain work				
14:00-17:30	aloup work	14.00-17:30	14:00-15:00		
00:/1-00:+1		00.71-00.11	14:00-13:00		
Group B		Group B	Group B		
Curriculum development		Curriculum development	Curriculum development		
Working on curriculum action		Working on curriculum action	Working on curriculum action		
plans:		plans:	plans:		
Steps in curriculum development		Training needs of BMKG staff	Preparing presentations of		
Overall purpose of the training		Setting learning objectives	curriculum action plans		
Target groups and training		Ir. Ingrid Gevers	Ir. Ingrid Gevers		
context linked to BMKG goals					
Ir. Ingrid Gevers					
	Group work		Goodbye dinner		

Appendix 2 List of participants

8	Name	M/F	Age	Employer	Position
1	Eka Suharguniyawan, SKM	Е		BMKG	Center for Climate Change and Air Quality, BMKG Headquaters
2	Sheila Dewi Ayu Kusumaningtyas, S.Si	f		BMKG	Center for Climate Change and Air Quality, BMKG Headquaters
3	Mamenun, S.Si	ш		BMKG	Center for Climate Change and Air Quality, BMKG Headquaters
4	Yan Firdaus	ш		BMKG	Center for Climate Change and Air Quality, BMKG Headquaters
5	Edison Kurniawan, M.Si.	ш		BMKG	Center for Climate Change and Air Quality, BMKG Headquaters
9	Arief Wibowo Suryo, ST	ш		BMKG	BMKG Regional I, Medan
7	Ania Supeni	f		BMKG	Meteorology Station, Polonia, Medan
∞	Hendri Irwandi, S.Si	E		BMKG	Climatology Station, Sampali, Medan
6	Lestari Naomi L.P, S.Si	f		BMKG	Geophysical Station, Tuntungan, Medan
10	Alberth Cristian Nahas, S.Si	ш		BMKG	Global Atmospheric Watch Station, Kototabang, Bukittinggi
11	Firda Amalia Maslakhah, S.Si	f		BMKG	Global Atmospheric Watch Station, Kototabang, Bukittinggi
12	Wido Hanggoro, S.Si	ш		BMKG	Research and Development, BMKG Headquarters
13	Ratna Satyaningsih, S.Si	f		BMKG	Research and Development, BMKG Headquarters
14	Eko Haryanto, S.Si	E		BMKG	Education and Training Center, BMKG Headquarters
15	Fera Adrianita, S.Si	٤		BMKG	Climatology Station, Lasiana, Kupang
16	Yosafat Donni Haryanto, SP	ш		BMKG	Meteorology Station, Juata Tarakan, Kalimantan
17	Didik Imam Fauzi	Е		BMKG	Climatology Station, Karangploso, Malang
18	Bambang Setiajid, ST	ш		BMKG	Meteorology Maritime Station, Perak, Surabaya
19	Wandayantolis, S.Si	Į.		BMKG	Climatology Station, Kayuwatu, Manado

Appendix 3 The Logical Framework and assessments of actions and verifications

Note. Columns 1-4 constitute the Logical Framework as presented in the Proposal; columns 5-6 are assessments of the actions to achieve the objectives and indicate the sources of verification.

Objectives, purpose, etc.	Performance indicators	Sources of verification	Assumptions, risks	Assessment	Documents available
					for verification
(1)	(2)	(3)	(4)	(5)	(6)
Longer term objective.	Center for Climate Change and	Core staff of well-trained	The training project can add to	The long term objective is not	
its task in Indonesian society as Air Ouality is centre of	Air Quality is centre of	experts.	the achievement of this	achieved by the tailor made	
the core organization	expertise on climate change	Scientific output.	objective; to achieve the	training only. The training	
understanding and dealing with	issues.	Clients expressing appreciation objective requires other and	objective requires other and	certainly contributed to the	
climate change, mitigation and		for BMKG products.	more longer term input.	long term objective, by	
adaptation.				upgrading the knowledge and skill levels of the participants	
Short term objectives.					
Transfer state-of-the-art	Curriculum of sufficient quality.	Statement by Quality Assurance Suitable accommodation at	Suitable accommodation at	The QAT was not installed.	
knowledge to the BMKG	Trainers with sufficient	Team.	reimbursable costs not		
participants on the issues of	qualifications.	CVs of trainers, lecturers.	available in Wageningen.	Trainers were all qualified	
climate change, climate change	Training actually taking place.	Final report training.		experts, as can be concluded	CVs trainers.
mitigation and adaption and		Email correspondence Team	Participants' pre-training level	from their CVs.	
related subjects.		Leader.	of knowledge insufficient.		
		Attendance sheets participants. Participants' command of	Participants' command of	Training took place as intended	
		Results assignments.	English insufficient.	(attendance sheets were not	Relevant invoices, email
				used).	correspondence, as well as
Train a selection of the BMKG		Presentations by participants to The selected participants	The selected participants		evaluation sheets by
participants to become internal		fellow-participants.	cannot internalize the training		participants.
trainers on the issues of		Evaluations of presentations by	Evaluations of presentations by information on climate change, Participants could make the	Participants could make the	

Alterra report 2205

37

Objectives, purpose, etc.	Performance indicators	Sources of verification	Assumptions, risks	Assessment	Documents available for verification
(1)	(2)	(3)	(4)	(5)	(9)
climate change, mitigation and	Selected participants able to	selected trainers.	etc.	exercises without problems.	Posters and power point
adaptation.	present relevant information on	Results assignments.	The selected participants		presentations as saved on DVD
	climate change etc. to		cannot translate the training		distributed to participants.
	colleagues.		information into presentations.	Group B participants prepared	
				curriculum of two days training	Curriculum as prepared by
				for BMKG staff to be given after	Group B participants.
				returning to Indonesia. The	
				course was actually given.	
				Trainers were very pleased with	
				the level of performance of the	
				participants when presenting	
				results of exercises	Oral communication with
					the communication with
:					trainers.
Results.					
Participants understand the	Sufficient quality assignments	Completed assignments.	Participants' skills in the use of	Generally participants had	Oral communication with
basics of climate change	completed.		computers insufficient.	sufficient background	trainers. Progress in execution
dynamics.				knowledge and motivation to	curriculum - adaptations to
			Participants' skills in surfing on	bring the exercises presented	curriculum to adapt to
Participants understand the			the internet insufficient	to them to a success. Trainers	participants' levels of
relative value of climate change				were all happy with the level of	knowledge were not needed.
2000			Darticinants, companyonos	notormanos of the	0
iiodeis.			shetract modeling inclifficient	periorite of the	
OOG! +			absulact modeling modificient:	paracipants.	
ranicipalits know about Ircc					
and its workings.				Basics of climate change	
				theory, climate change models	Post-training evaluation.
Participants can independently				and the operations of the IPCC	
from others search for and find				were core topics taught at the	
relevant climate change data				training course. Participants	
on the internet.				indicated satisfaction with the	
				trainings in the post-training	
Participants are able to				evaluation.	
translate acquired knowledge					
-					

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Objectives, purpose, etc.	Performance indicators	Sources of verification	Assumptions, risks	Assessment	Documents available
					for verification
(1)	(2)	(3)	(4)	(5)	(6)
into presentations and training modules.			Insufficient time to train trainers' skills in participants.	All participants had good to excellent computer and internet skills.	
Participants can organize and actually execute effective	Participants have successfully prepared training modules.	Training modules prepared by participants.			Presentations by participants, as saved on DVD distributed to
training sessions on climate change, etc.			Acquired knowledge insufficiently internalized to	Participants were asked to	participants after the training.
	Participants have successfully	Feed back on presentations by	present in presentations.	demonstrate how they could apply the acquired knowledge	Posters as collected and saved by Course Coordinator.
	given presentations on the basis of acquired knowledge.	trainers and participants.		in their work; they did so satisfactorily.	,
				Participants were asked to	Curriculum prepared for BMKG
				translate the acquired	in-house training course.
				knowledge in a curriculum for use at home; they did so satisfactorily.	
Activities:					
Team Leader consults with	Quality of proposal.	The proposal.		Frequent consultations with	Proposal and post-training
BMKG and defines objectives,				BMKG helped shaping the	report.
training plan, summarizes and				Proposal; the Proposal was co-	82
further develops demand from				signed by the BMKG	
BMKG.				representative. Also, the	
Selection of participants.				Course Coordinator paid a pre- training visit to BMKG.	
	Participants able to	Reports on training in progress.			
	successfully follow the training			The Providing Institution	
Team Leader prepares	course.			assisted with the selection of	
curriculum together with		The curriculum.		participants.	Selection-of-participants
prospective trainers and	Quality of the curriculum.		One of the participating		statement by Course
lecturers.			institutes cannot deliver	The curriculum was designed in	Coordinator written on request
			(substitute will be contracted).	constant consultation with the	of BMKG.
leam Leader prepares			Postal services malfunction.	main trainers and met with the	

v of acceptable Incoming mail records NESO. Board and lodging at and lodging at reimbursable costs not available in Wageningen or IDeltares, CDI, and KIMVI) vicinity. Evaluation sheets participants. Evaluation sheets participants. Evaluation sheets participants. Evaluation sheets participants. Evaluation sheets participants. Evaluation sheets participants. Evaluation sheets participants. All participants unanimously rated the course successful and transport service company. All logistics were operative as planned. All logistics were operative as planned.	Objectives, purpose, etc.	Performance indicators	Sources of verification	Assumptions, risks	Assessment	Documents available
12 15						for verification
Timely delivery of acceptable Incoming mail records NESO- proposal and budget. Adequate board and lodging and other facilities. Evaluations by participants. Evaluations by participants. Buses available on time. Agreements reached between Back to office reports. Agreements reached between Back to office reports. Proposal and between providing Organizing and organizing. Incompany available and providing organizing and organizing. Agreements reached between Back to office reports.	(1)	(2)	(3)	(4)	(5)	(9)
g Adequate board and budget. Indonesia. A dequate board and lodging at and other facilities. Evaluations by participants. Buses available on time. Buses available on time. A greenments reached between Back to office reports. A greenment between Back to office reports.	proposal and budget.	Timely delivery of acceptable	Incoming mail records NESO.		approval of BMKG as well as of	
Acquate board and lodging at and other facilities. An and other facilities. Evaluation sheets participants. Evaluation sheets participants. Buses available on time. Buses available of time. All participants in structions by participants. Buses available on time. All participants in agreement and transport service company. All participants in agreement and transport service company. All logistics were operative as planned. All logistics were operative as planned.		proposal and budget.	Indonesia.		the participants.	Subsequent versions of
and other facilities. Adequate board and lodging Adequate board and lodging Autotion sheets participants Autother facilities.				Board and lodging at		curriculum and relevant email
and other facilities. Evaluation sheets participants. Evaluations by participants. Evaluations by participants. Buses available on time. Records of communication between Providing Organization and transport service company. All Possitics were operative as planned.	Organizing logistics, including	Adequate board and lodging		reimbursable costs not	All participating institutions	correspondence.
Evaluations by participants. Buses available on time. Buses available on time. Buses available on time. Buses available on time. All participants unanimously rated the course successful and executed in agreement with plans. and transport service company. a. Agreements reached between Back to office reports. st Agreements and organizing.	board and lodging.	and other facilities.	Evaluation sheets participants.	available in Wageningen or	(Deltares, CDI, and KMNI)	
Evaluations by participants. Buses available on time. Buses available on time. Buses available on time. Records of communication between Providing Organization and transport service company. and transport service company. and transport service company. and transport service company. All logistics were operative as planned. All logistics were operative as planned.				vicinity.	delivered according to plan and	
Evaluations by participants. Buses available on time. Records of communication between Providing Organization and transport service company. All logistics were operative as planned. All participants unanimously rated the course successful and executed in agreement with plans. All logistics were operative as planned.				Lecture room not available.	as agreed.	
Buses available on time. Buses available on time. Records of communication between Providing Organization and transport service company. All logistics were operative as planned. All logistics were operative as planned.	Executing training, including	Evaluations by participants.				Contract letters and invoices.
Buses available on time. Records of communication between Providing Organization and transport service company. and transport service company. All logistics were operative as planned. All event operative as planned.	excursions.		Evaluation sheets participants.		All participants unanimously	
Records of communication and executed in agreement between Providing Organization and transport service company. Per and transport service company. All logistics were operative as planned. All logistics were operative as planned. All logistics were operative as planned.		Buses available on time.			rated the course successful	
re Agreements reached between Back to office reports.	Organizing transport of		Records of communication		and executed in agreement	
re Agreements reached between Back to office reports. All logistics were operative as planned.	participants to and from		between Providing Organization		with plans.	1
re signature as planned. All logistics were operative as planned. Planned. All logistics were operative as planned. Planned. Planned. Requesting and organizing.	Schiphol airport.		and transport service company.			Evaluation sheets.
re ia. Agreements reached between Back to office reports.					All logistics were operative as	
ia. Agreements reached between Back to office reports. requesting and organizing	Note: international flights to				planned.	
ia. Agreements reached between Back to office reports. requesting and organizing	and from Schiphol for					
Agreements reached between Back to office reports. requesting and organizing	participants is organized by					
Agreements reached between Back to office reports. requesting and organizing	NESO-Indonesia. Also visa are					
Agreements reached between Back to office reports. requesting and organizing	organized by NESO-Indonesia.					Relevant invoices.
Agreements reached between Back to office reports. requesting and organizing	Programme acionim leocucar ord					
requesting and organizing	training mission to BMKG.	Agreements reached between	Back to office reports.			Back to office reports.
00		requesting and organizing				ės:
organizations		organizations				

Appendix 4 Results evaluation NESO-Indonesia among participants BKMG

						ROM								
	Other (please specify)	colleague	BMKG			My office ANNOUNCEMENT FROM	MI OFFICE	Friend		electronic)				
	Advertisement (printed or electronic)									Advertisement (printed or electronic)				
	Social media	.or.id)	<u>.</u>	or.id)	.or.id)	.or.id)		.or.id)						or.id)
	Website (www.stuned.or.id)	Website (www.stuned.or.id)	Website (www.strined.orid)	Website (www.stuned.or.id)	Website (www.stuned.or.id)	Website (www.stuned.or.id)		Website (www.stuned.or.id)						Website (www.stuned.or.id)
s possible)	Alumni								Alumni					
ultiple answer	Dutch Institution							<u>.</u> _		<u>.</u> _				
gramme? (m	Education fair							Education fair		Education fair				
scholarship pro	My employer		My employer	My employer	My employer My employer						My employer	My employer	My employer	My employer
How did you get information about the StuNed scholarship programme? (multiple answers possible)	Nuffic Neso Indonesia	Nuffic Neso Indonesia	Niffic Neco Indonesia		Nuffic Neso Indonesia	Nuffic Neso Indonesia	Nuffic Neso Indonesia		Nuffic Neso Indonesia	Nuffic Neso Indonesia	Nuffic Neso Indonesia			Nuffic Neso Indonesia
How did you get info	The Netherlands Embassy	The Netherlands	6											
2		1 2	e 4	2	9	& O	10	11	12	13	14	15	16	1/

Alterra report 2205

41

	bns gniybutz no notsmrotni Isotoser9 A/N bnslloH ni gnivil																		
	Practical information on studying and living in Holland Poor																		
	Practical information on studying and living in Holland Fair							Fair										Fair	
	Practical information on studying and living in Holland Good		Good	Good	Good	Good	Good		Good			Good	Good						Good
ne?	Practical information on studying and living in Holland - Excellent	Excellent								Excellent	Excellent			Excellent	Excellent	Excellent	Excellent		
As a participant, how would you rate the following aspects of the information that you received about the StuNed TM programme?	A\N anotistuger and regulations																		
t the StuNed	Rules and regulations Poor																		
received abou	Rules and regulations Fair							Fair	Fair									Fair	
on that you	Rules and regulations Good	Good	Good	Good	Good	Good	Good					Good	Good	Good		Good			Good
the informati	Rules and regulations Excellent									Excellent	Excellent				Excellent		Excellent		
g aspects of	A\V -																		
e the followin	Application and selection procedure Poor																		
would you rat	Application and selection procedure -				Fair		Fair	Fair					Fair						
cipant, how	Application and selection procedure -		Good	Good		Good			Good			Good		Good				Good	
As a parti	Application and selection procedure - Excellent	Excellent								Excellent	Excellent				Excellent	Excellent	Excellent		Excellent
8		1	7	က	4	2	9	7	∞	6	10	11	12	13	14	15	16	17	18

8	No What is your overall opinion of the content of the training?	raining?		
	Excellent	Good	Fair	Poor
1	Excellent			
7		рооб		
က		Good		
4	Excellent			
2		Good		
9	Excellent			
7		рооб		
_∞		Good		
6	Excellent			
10	Excellent			
11	11 Excellent			
12		poog		
13		Good		
14	14 Excellent			
15	Excellent			
16		роод		
17	17 (Good		
18		Poop		

N	What kind of trai	ning methods w	ere used and how	would you rate	No What kind of training methods were used and how would you rate its effectiveness and relevance of each method?	and relevance of	f each method?					
	Group assignment - - Very relevant	Group assignment - - Relevant	Group assignment - - Not relevant	Group assignment - - N/A	Individual assignment - - Very relevant	Individual assignment - - Relevant	Individual assignment - - Not relevant	Individual assignment - - N/A	Lectures - - Very relevant	Lectures - - Relevant	Lectures - - Not relevant	Lectures - - N/A
-		Relevant				Relevant			Very relevant			
۰ ۵		Relevant				Relevant				Relevant		
က		Relevant				Relevant				Relevant		
4	Very relevant			Very relevant			Very relevant		Very relevant			
2		Relevant				Relevant			Very relevant			
9		Relevant				Relevant			Very relevant			
7		Relevant				Relevant			Very relevant			
_∞		Relevant				Relevant				Relevant		
6		Relevant				Relevant				Relevant		
10	Very relevant			Very relevant			Very relevant		Very relevant			
11	Very relevant			Very relevant			Very relevant		Very relevant			
12		Relevant				Relevant				Relevant		
13		Relevant				Relevant				Relevant		
14	Very relevant			Very relevant			Very relevant		Very relevant			
15	Very relevant			Very relevant				Relevant		Relevant		
16	Very relevant			Very relevant			Very relevant		Very relevant			
17	Very relevant				Relevant					Relevant		
18		Relevant				Relevant			Very relevant			

8	No What kind of training methods were used and how would you rate its effectiveness and relevance of each method?	ods were used and hov	wwould you rate its effect	iveness and relevance of	f each method?			
	Exercises - - Very relevant	Exercises - - Relevant	Exercises - - Not relevant	Exercises - - N/A	Case study - - Very relevant	Case study - - Relevant	Case study - - Not relevant	Case study - - N/A
-		Relevant				Relevant		
2		Relevant				Relevant		
က	Very relevant			Very relevant			Very relevant	
4	Very relevant				Relevant			
2		Relevant				Relevant		
9	Very relevant			Very relevant			Very relevant	
7		Relevant				Relevant		
∞		Relevant				Relevant		
6		Relevant				Relevant		
10	Very relevant			Very relevant			Very relevant	
11		Relevant			Very relevant			
12		Relevant					Not relevant	
13		Relevant				Relevant		
14	Very relevant			Very relevant			Very relevant	
15	Very relevant			Very relevant				Relevant
16		Relevant				Relevant		
17	Very relevant				Relevant			
18	Very relevant			Very relevant				Relevant

No	What kind of training	methods were used	and how would you	rate its effectivenes	No What kind of training methods were used and how would you rate its effectiveness and relevance of each method?	thod?		
	Literature study Very relevant		Literature study - Literature study Relevant - Not relevant	Literature study - - N/A	Field visit/excursion Very relevant	Field visit/excursion Relevant	Field visit/excursion Not relevant	Field visit/excursion N/A
-	Very relevant				Relevant			
2		Relevant				Relevant		
က			Relevant					
4	Relevant				Relevant			
2		Relevant				Relevant		
9		Very relevant						
7		Relevant				Relevant		
_∞		Relevant				Relevant		
6		Relevant				Relevant		
10		Very relevant						
11	Relevant			Very relevant				
12	Relevant			Very relevant				
13		Relevant				Relevant		
14		Very relevant						
15			Very relevant					
16		Relevant				Relevant		
17	Relevant				Relevant			
18			Very relevant					

No Nes (piezze specify) No Excelent No Cimate modeling Excelent Cood	?										
Decement modelling background by climate change modelling background by climate change modelling scenario) Excellent modelling using software. Because the limited modelling, using software. Because the limited modelling, using software. Because the limited modelling, using software. Because the limited time, I feel it's not enough to cover all the details in how-to operate/calculate/model the tools moved operate/calculate/model the tools Excellent Good climate change modelling practice/exercise Excellent		No Yes (please specify)	and experience -	and experience - - Good Relevant knowledge and experience -	and experience - - Poor Delivery of lecture -	Delivery of lecture -	Fair	- Poor English proficiency -	English proficiency - - Good	English proficiency - - Fair	English proficiency - - Poor
climate modeling Good Good climate change modeling scenario) Excellent Good in-depth knowledge in technical stuff, like Excellent Good modelling, using software. Because the limited time, I feel it's not enough to cover all the details Excellent Good nime, I feel it's not enough to cover all the details Excellent Good Excellent No climate model exercise Excellent Excellent Good No climate change modelling practice/exercise Excellent Excellent Excellent No more technical skills in terms of climate Excellent Good Good No modelling and analysis Excellent Excellent Fixellent No modelling and analysis Excellent Excellent No modelling and analysis Excellent Fixellent No Excellent Excellent Fixellent No Docal impacts of climatechange (in sub areas) Excellent Fixellent No Excellent Fixellent Fixellent	-	ON.	Excellent			Good		Excellent			
climate change modeling (building scenario) Excellent modeling using software at the details in how to operate/calculate/model the tools Excellent modeling using software at the details Excellent modeling using software at the details Good modeling using software at the details Excellent modeling using software at the details Excellent model were at the details Exc	2	climate modelling	Good		Good			Good			
in-depth knowledge in technical stuff, like Excellent modelling, using software. Because the limited time, I feel it's not enough to cover all the details In how to operate/calculate/model the tools provided	က	climate change modeling (buikding scenario)	Excellent			Good			Good		
modelling, using software. Because the limited time, I feel it's not enough to cover all the details in how-to operate/calculate/model the tools provided No climate model exercise Cimate model exercise Cimate change modelling practice/exercise Cimate modelling practice/exercise Cood Cood Cood Cood Cood Cood Cood Coo	4	in-depth knowledge in technical stuff, like	Excellent			Good		Excellent			
time, I feel it's not enough to cover all the details time, I feel it's not enough to cover all the details in how/to operate/calculate/model the tools Good No Excellent Good climate model exercise Excellent Good No Excellent Excellent No Excellent Excellent No Excellent Good modelling and analysis Excellent Good No Excellent Excellent No Excellent Excellent Indonesia is too large to generalise) Good No Good		modelling, using software. Because the limited									
No Excellent Good Excellent Good Excellent Good Excellent Good Goo		time, I feel it's not enough to cover all the details in hower operate/calculate/model the tools									
No Excellent Good Excellent Good climate model exercise Excellent Good Good No Excellent Excellent Excellent Excellent No Excellent Excellent Excellent No Excellent Excellent Good No Excellent Good No Excellent Good No Excellent Excellent No Excellent Excellent No Excellent Excellent No Excellent Excellent Indonesia is too large to generalise) Excellent No Good		provided									
No Excellent Good No Excellent Excellent No Excellent Good No Excellent Excellent Indonesia is too large to generalise) Excellent No Excellent Excellent Rood Excellent Excellent <td>2</td> <td>No</td> <td></td> <td>Good</td> <td>Excellen</td> <td>+</td> <td></td> <td></td> <td>Good</td> <td></td> <td></td>	2	No		Good	Excellen	+			Good		
climate model exercise Excellent Good No Excellent Excellent No Excellent Excellent No Excellent Excellent No Excellent Excellent modelling and analysis Excellent Good No Excellent Excellent No Excellent Excellent No Excellent Excellent Indonesia is too large to generalise) Excellent Excellent No Good Excellent Indonesia is too large to generalise) Good	9	No	Excellent			Good		Excellent			
No Excellent Good climate change modelling practice/exercise Excellent Excellent No Excellent Excellent No Excellent Good modelling and analysis Excellent Good No Excellent Excellent No Excellent Excellent Indonesia is too large to generalise) Excellent Excellent No Excellent Excellent Indonesia is too large to generalise) Good Rood Good	7	climate model exercise	Excellent			Good		Excellent			
climate change modelling practice/exercise Excellent Good More technical skills in terms of climate Excellent Excellent More technical skills in terms of climate Excellent Exce	_∞	No	Excellent			Good			Good		
No Excellent Excellent No Excellent Excellent No Excellent Good modelling and analysis Excellent Good No Excellent Excellent local impacts of climatechange (in sub areas, local indonesia is too large to generalise) Excellent Excellent No Good Good	6	climate change modelling practice/exercise	Excellent		Excellen	+		Excellent			
No Excellent Excellent No Excellent Good more technical skills in terms of climate Excellent Good modelling and analysis Excellent Excellent No Excellent Excellent local impacts of climatechange (in sub areas, lool areas) Excellent Fair Indonesia is too large to generalise) Good Good	10	No	Excellent		Excellen	+		Excellent			
No Excellent Good modelling and analysis Excellent Good No Excellent Excellent No Excellent Excellent Indonesia is too large to generalise) Good No Good Indonesia is too large to generalise) Good	1		Excellent		Excellen	+		Excellent			
more technical skills in terms of climate Excellent Good modelling and analysis No Excellent Excellent No local impacts of climatechange (in sub areas, Indonesia is too large to generalise) Good Good Good Good Good Good	12	No	Excellent			Good			Good		
modelling and analysis No Excellent No Excellent Excellent Local impacts of climatechange (in sub areas, indexed) Excellent Fair Rood Good Good Good	13	more technical skills in terms of climate	Excellent			Good		Excellent			
No Excellent Excellent No Excellent Excellent local impacts of climatechange (in sub areas, Excellent Excellent Indonesia is too large to generalise) Good Good Good		modelling and analysis									
No Excellent Excellent Inpacts of climatechange (in sub areas, Excellent Indonesia is too large to generalise) Good Good Good	14	No	Excellent		Excellen	+		Excellent			
local impacts of climatechange (in sub areas, Excellent landonesia is too large to generalise) Good Good	15		Excellent		Excellen	+		Excellent			
No Good	16	local impacts of climatechange (in sub areas, indonesia is too large to generalise)	Excellent				Fair	Excellent			
	17			Good		Good			Good		
Excellent	18		Excellent			Good			Good		

2	Did you encounter any serious problem regarding housing arranged by the Dutch Institution during your stay in the Netherlands?	Did you encounter any serious problem regarding transportation arranged by the Dutch Institution during your stay in the Netherlands?	Did you encounter any serious problem regarding insurance (health and travel) arranged by the Dutch Institution during your stay in the Netherlands?
	No Yes (please specify)	No Yes (please specify)	No Yes (please specify)
1	No	9	No
2	No	No	No
က	No	No	No
4	No	No	No
2	No	No	No
9	No	No	No
7	No	No	No
∞	No	No	No
6	No	No	No
10	No	No	No
11	No	No	No
12	No	No	No
13	No	No	No
14	No	No	No
15	No	No	No
16	No	No	No
17	No	No	No
18	No	No	No

	With respect to help with problems	ito																	
	With respect to help with problems Poor																		
	With respect to help with problems Fair								Fair										
	With respect to help with problems Good	Good	Good	Good	Good	Good	Good	Good				Good	Good	Good			Good	Good	Good
	With respect to help with problems Excellent									Excellent	Excellent				Excellent	Excellent			
	With respect to the information provided - A\N -																		
	With respect to the information provided - Poor																		
	With respect to the information provided - Fair												Fair						
	With respect to the information provided -		Good	Good	Good	Good		Good	Good					Good	Good		Good	Good	
÷	With respect to the information provided - Excellent	Excellent					Excellent			Excellent	Excellent	Excellent				Excellent			Excellent
How would you rate the specific assistance offered by the Dutch Institution?	With respect to logistics (housing, TA/A (A/A																		
ce offered by th	With respect to logistics (housing, transportation, insurance) Poor																		
specific assistan	With respect to logistics (housing, transportation, insurance) Fair						Fair	Fair	Fair										
you rate the	With respect to logistics (housing, transportation, insurance) Good	Good	Good	Good		Good						Good	Good	Good				Good	Good
How would	With respect to logistics (housing, transportation, insurance) Excellent				Excellent					Excellent	Excellent				Excellent	Excellent	Excellent		
8		-	2	က	4	2	9	7	œ	6	10	11	12	13	14	15	16	17	18

Š	Have studie	No Have arrangements been made to help you keep in touch with the Dutch Institution where you studied, or with other Dutch Institutions, after the completion of	he allowances provided	The allowances provided by the StuNed scholarship was	
	No	Yes (please specify)	More than sufficient	Sufficient	Almost Sufficient
-		We are welcome to keep in touch with Alterra-WUR since BMKG plans to have the same training next year also in Wageningen	next year also in Wagen	ingen	Almost Sufficient
2				•	Almost Sufficient
က	S				Almost Sufficient
4	S			Sufficient	
2		email		Sufficient	
9		an arrangement have been made by the development of web portal for the training participants			Almost Sufficient
7		by e-mail			Almost Sufficient
œ		but not formally, only by email			Almost Sufficient
6		related to action plan and training of Climate Change			Almost Sufficient
10	10 No				Almost Sufficient
11		We have a portal on Alterra-Wageningen University			Almost Sufficient
12		contacts are provided so we can still keep in touch with lecturers/facilitators			Almost Sufficient
13		contact addresses		Sufficient	
14		Nuffic- Neso Indonesia help us to keep in touch	More than sufficient		
15		I'M JOINING TO IKANED			Almost Sufficient
16		Personal agreement with trainers			Almost Sufficient
17		STUNNED ALUMNI			Almost Sufficient
18		via Course Coordinator			Almost Sufficient

51

	With respect to problem(s) prior to departure Poor																		
	With respect to problem(s) prior to departure Fair		Fair					Fair	Fair				Fair						
	With respect to problem(s) prior to departure Good	Good		Good	Good	Good	Good					Good		Good		Good		Good	Good
	With respect to problem(s) prior to departure Excellent									Excellent	Excellent				Excellent		Excellent		
	Pre departure arrangement (visa/service passport application, air ticket, briefing) Poor																		
	Pre departure arrangement (visa/service passport application, air ticket, briefing) Fair					Fair		Fair											
ndonesia	Pre departure arrangement (visa/service passport application, air ticket, briefing) Good		Good	Good	Good		Good		Good			Good		Good				Good	
	Pre departure arrangement (visa/service passport application, air ticket, briefing) Excellent	Excellent								Excellent	Excellent		Excellent		Excellent	Excellent	Excellent		Excellent
How would you rate the specific assistance offered by Neso Indonesia	With respect to information provided - - Poor																		
ecific assistance	With respect to information provided - - Fair							Fair	Fair										
you rate the sp	With respect to information provided - - Good	Good	Good	Good		Good	Good					Good	Good	Good				Good	Good
No How would	With respect to information provided - - Excellent	1	2	က	4 Excellent	5	9	7	8	9 Excellent	10 Excellent	11	12	13	14 Excellent	15 Excellent	16 Excellent	17	18

No Do you have any of training to training to the state of the state o	Do you have any other suggestions for the improvement of StuNed Tailor Made training?	se specify)		training tailored to the specific competence and more	please create advance or continuing training, e.a 3 years of climate change modeling training for 1 month of each year in netherland	if possible the awardees could have some say in choosing the arrangement of allowance. I mean, maybe the participants can choose individually on which type of the subsistence	allowances. Probably there's some poeple who wishes to cook by themselves, or th					adding the study of climate change modelling from beginners to advance	I WANT TO CONTINUE LEARN IN POST GRADUATE BECAUSE I HAD OBTAINED THIS SCHOLARSHIP IN TAILOR MADE		Next TM should be more specific to the need, either it is for technical or ToT aspects, so that with in 4 weeks, participants will get more information with regards to their needs		Provide more allowance and Indonesian food	APPROPRIATE LEVEL OF TRAINING	
	you have any other suggestic	yes (please specify)		training tailored to the s	please create advance	if possible the awardees	allowances. Probably th					adding the study of clim	I WANT TO CONTINUE L		Next TM should be more		Provide more allowance	APPROPRIATE LEVEL 0	
		S.	1 No	2	က	4		5 No	9 No	7 No	8 No	6	10	11 No	12		16	17	



Alterra report 2205 53



Alterra is onderdeel van de internationale kennisorganisatie Wageningen UR (University & Research centre). De missie is 'To explore the potential of nature to improve the quality of life'. Binnen Wageningen UR bundelen negen gespecialiseerde en meer toegepaste onderzoeksinstituten, Wageningen University en hogeschool Van Hall Larenstein hun krachten om bij te dragen aan de oplossing van belangrijke vragen in het domein van gezonde voeding en leefomgeving. Met ongeveer 40 vestigingen (in Nederland, Brazilië en China), 6.500 medewerkers en 10.000 studenten behoort Wageningen UR wereldwijd tot de vooraanstaande kennisinstellingen binnen haar domein. De integrale benadering van de vraagstukken en de samenwerking tussen natuurwetenschappelijke, technologische en maatschappijwetenschappelijke disciplines vormen het hart van de Wageningen Aanpak.

Alterra Wageningen UR is hèt kennisinstituut voor de groene leefomgeving en bundelt een grote hoeveelheid expertise op het gebied van de groene ruimte en het duurzaam maatschappelijk gebruik ervan: kennis van water, natuur, bos, milieu, bodem, landschap, klimaat, landgebruik, recreatie etc.

Meer informatie: www.alterra.wur.nl