Final Survey of Project Target Group: Results and Comparison with Baseline Survey
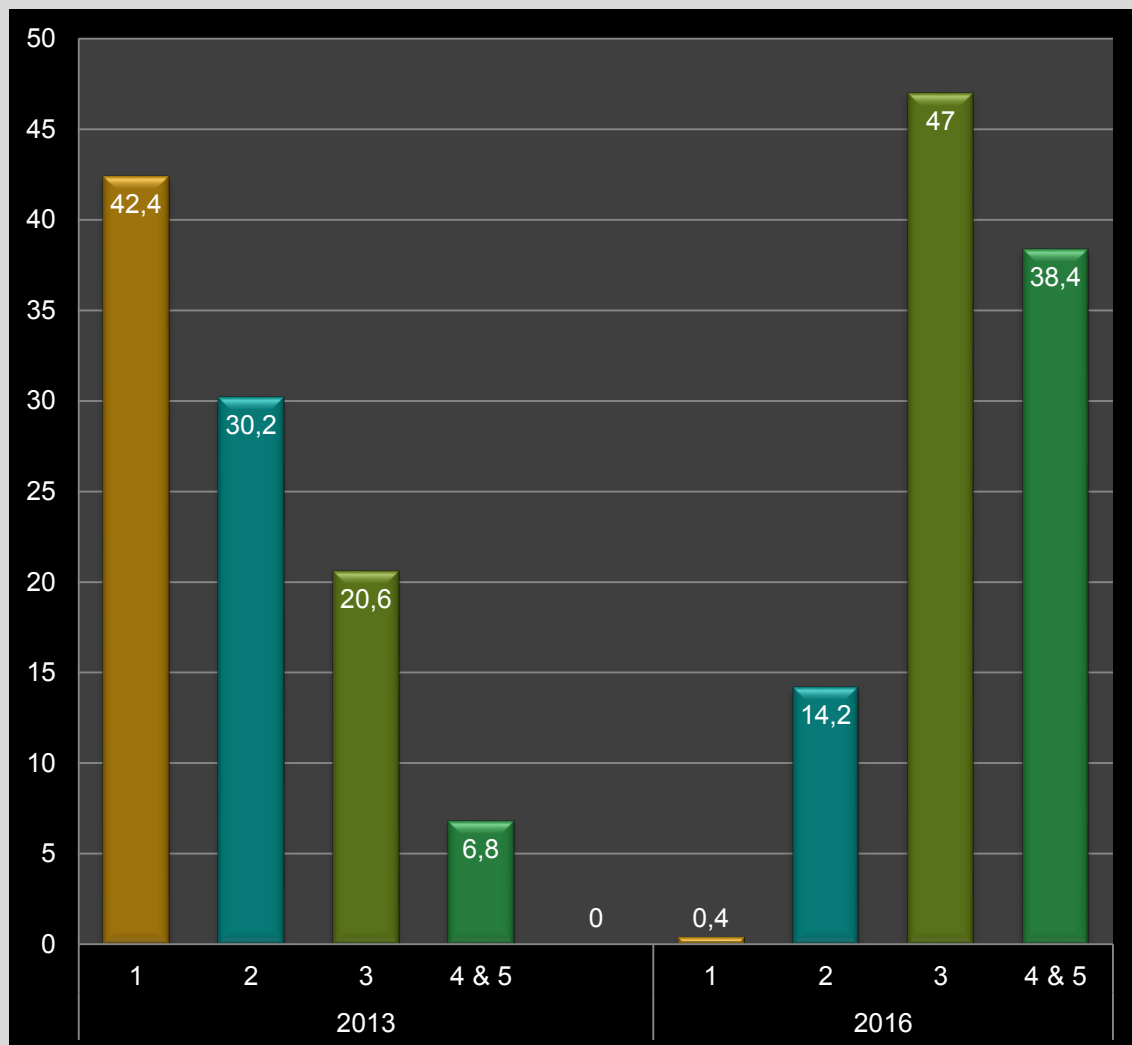
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Document details

Preface

This report is developed as an activity under the Sino-Norwegian cooperation project "Planning for cost-effective environmental risk reduction", which began in 2013 and ends in 2016. The project involves capacity building of governmental staff working with environmental planning and emergency management in China.

In order to monitor knowledge development in the target group, a mapping survey was carried out at the beginning and at the end of the project. Results of the final survey are presented here, and compared with the situation in the baseline survey.

A full presentation of the training program carried out in the project can be found in the Vista report "Planning for cost-.effective environmental risk reduction in China: Training plan and activities (2013-2016)" (Vista report 2016/12).

Dr. Haakon Vennemo

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Content

Summary

Background and methodology

The Sino-Norwegian cooperation project "Planning for cost-effective environmental risk reduction" (2013-2016) involved capacity building of governmental staff working with environmental planning and emergency management in China. In order to monitor knowledge development in the target group, a mapping survey was carried out at the beginning and at the end of the project.

In 2013, the target group consisted of 103 persons from the Ministry of Environmental Protection (MEP) and Chinese Academy of Environmental Planning (CAEP) (27 person in total), the provincial Environmental Protection Bureaus (EPB) in Jiangsu and Guizhou (49 persons), and the city EPBs in Tongling and Anshun (27 persons). The mapping consisted of self-reporting from project participants, using questionnaires. 90% of those who filled in the first baseline questionnaire also filled in the final questionnaire. The mapping was carried out by CAEP, with guidance from Vista.

There are drawbacks with using self-reporting to measure knowledge development, such as a risk of participants not reporting honestly or accurately due to possibilities for different interpretations and/or different degrees of self-knowledge in the target group. A development in knowledge levels may also be attributed to other factors than this project and we have in the surveys not attempted to investigate that in depth. All in all we consider that the surveys give a robust indication of the impact of the capacity building activities on the target group of the project.

A consistent and substantial positive development in knowledge levels

A comparison of the two surveys – the baseline survey and the final survey – shows a consistent and substantial positive development of knowledge in the target group.

**Figure A: Development in knowledge levels, 5 main topics aggregated (in % of group)**
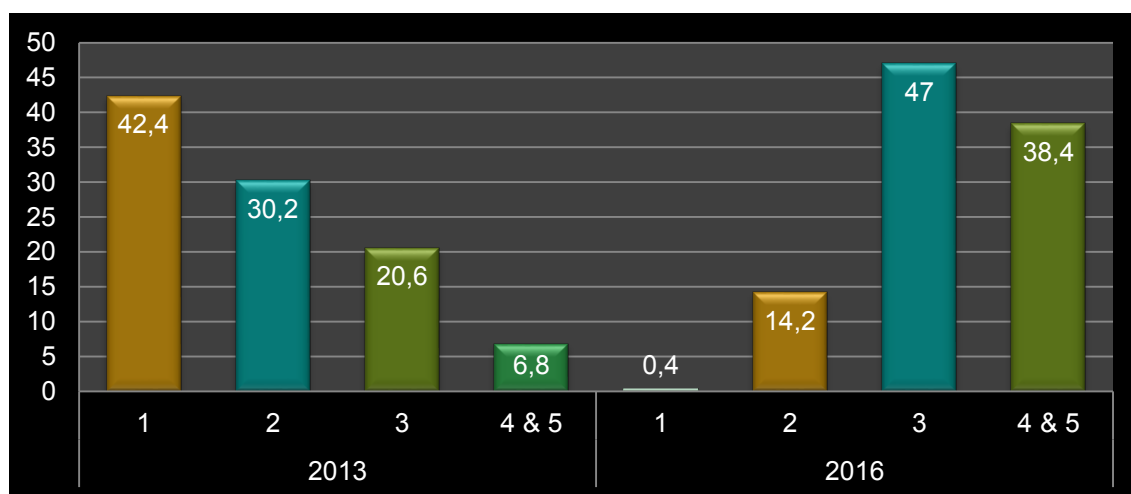
In the survey we distinguished between 5 knowledge levels; Level 1 = No knowledge, Level 2 = Basic knowledge (familiarity), Level 3 = Theoretical knowledge, Level 4 = Application level knowledge, and 5 = Expert level knowledge.

In the survey we asked respondents to rank their knowledge of main topics in the project: Cost Benefit Analysis (CBA), Strategic Environmental Assessment (SEA), environmental risk reduction methodologies, as well as international experience with environmental planning and environmental risk reduction methodologies.

When we aggregate the responses on these five topics (ref. figure A above), we see that 27% of the group were at knowledge level 3, 4 or 5 in 2013 and that this increased to 85% in 2016. The share stating their knowledge level is 1 has fallen from 42% to 0.4%, the share with knowledge level 2 has fallen from 30% to 14 %, the share with knowledge level 3 has risen from 21% to 47%, and the share with knowledge level "applicable" (4) or "expert" (5) level has increased from 6.8% to 38%.

Figure B: Development in knowledge levels, different topics (in % of group)
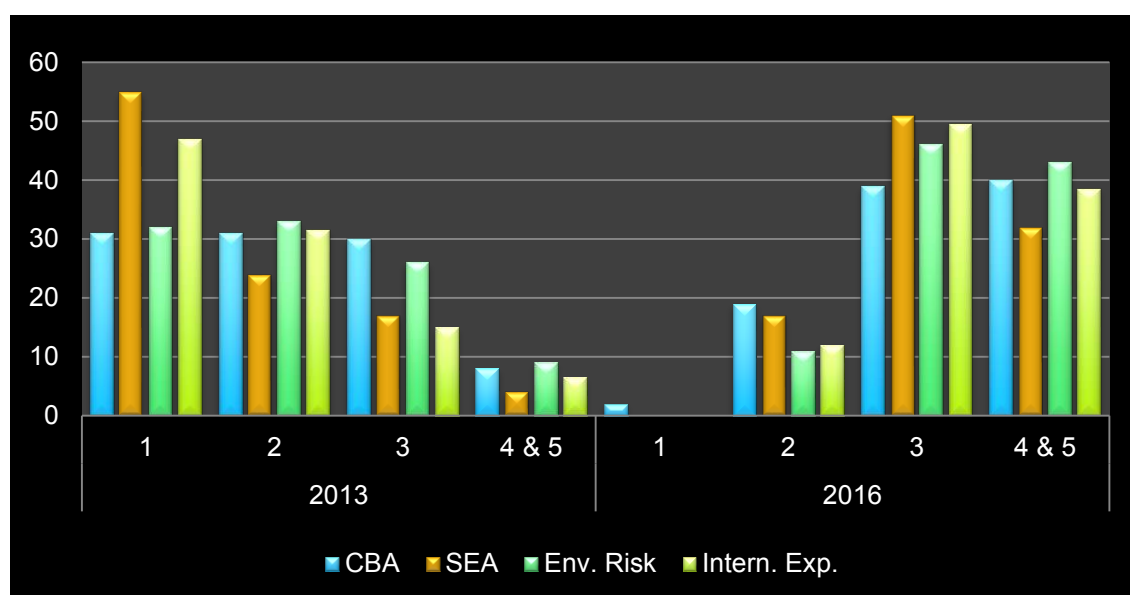
As shown in figure B above, the increase in knowledge levels generally shows the same positive pattern for the different main topics: CBA (total of 79% on level 3, 4 or 5), SEA (total of 83% on level 3, 4 or 5), environmental risk reduction methodologies (total of 87% on level 3, 4 or 5), and international experiences (total of 88% on level 3, 4 or 5). The topic 'Environmental Risk Reduction Methodologies' got the highest share of experts, with 43%.

We do, however, see differences between the main groups of the project; government officials at central level (MEP/CAEP), provincial level (Jiangsu and Guizhou) and local city level (Tongling and Anshun), ref. figure C below.

Figure C: Development in knowl. levels, main topics (aggregated) by groups (% of group)
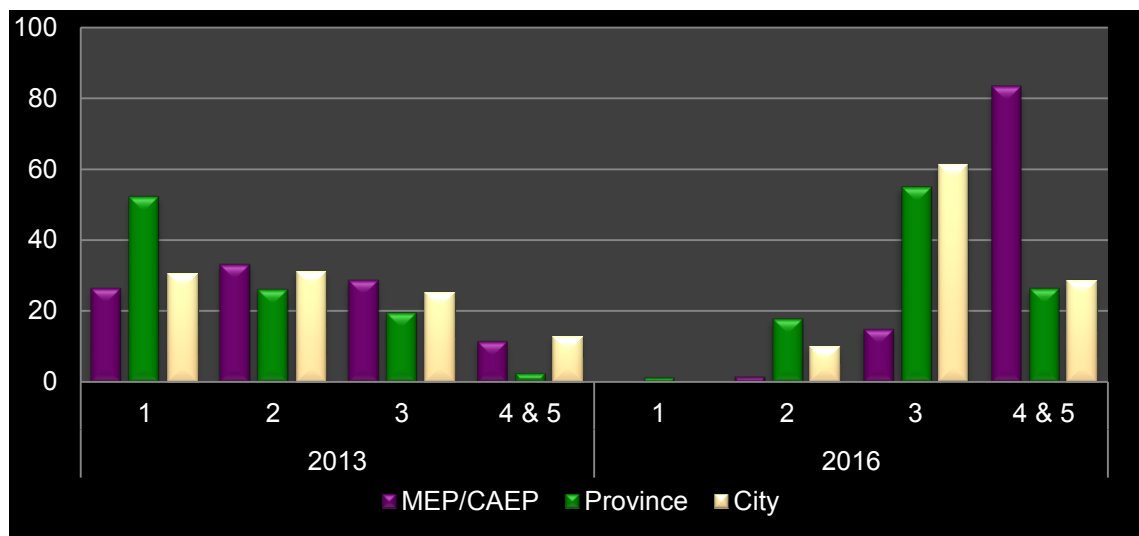
The general picture is that especially the MEP/CAEP staff has benefited from the project – with more than 80% of participants at a knowledge level of 4 or 5 (compared with 11% when the project began). This is not surprising, as the MEP/CAEP group also includes 11 staff that participated in the core project group (see below).

Improvement for provincial and city/local staff is also high, however, with more than 80% of participants at a knowledge level of 3, 4 or 5 (compared with +20% at the beginning of the project). It is surprising that the city/local participants score higher than provincial participants (both in 2013 and 2016), as it goes against the general impression that provincial participants have higher skills levels. It may simply be due to different standards for self-reporting, as the difference is not very big – but consistent.

It is worth noting that when conducting the final survey, we received a number of responses (32) from staff at MEP/CAEP who had not participated in the project. They consistently score higher than the target group did in 2013, but significantly lower than the target group participants who had been involved in the project. This indicates that in the period of the project there has been a general increase at MEP/CAEP in the project topics, but that the participants have developed their knowledge even further.

Figure D: Development in knowledge of GAINS and MSG-6, by main groups (% of group)
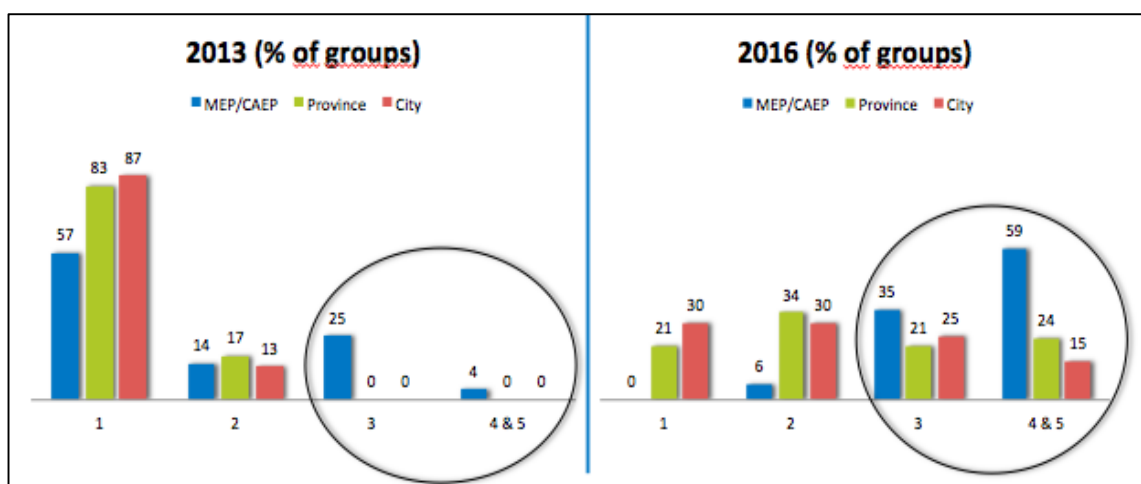
The project also had a focus on training related to use of GAINS and MSG-6 methodologies. This training was mainly aimed at CAEP staff, and was not included in the four training sessions held especially for the pilot provinces and cities. Survey results (ref. figure D above), show a signifant increase in knowledge levels at the CAEP/MEP level where more than 90% have reached theoretical level of knowledge (3) or more and 60% have an applicable (4) or expert (5) level of knowledge. Also provinces and cities have clearly benefited from the training related to GAINS and MSG-6, with about 50% at level 3, 4 or 5.

Table A: Knowledge level of CAEP trainers; baseline (B) and at end of project (E)

Name	Degree of knowledge of									
	CBA		SEA		Int. experience with env. planning		Int. experience with env. risk management		GAINS	
	B	E	B	E	B	E	B	E	B	E
Average score	**3.2**	**4.5**	**2.3**	**4.2**	**2.8**	**4.1**	**2.5**	**4.8**	**1.8**	**3.6**

In the project, there was also a core project group on the Chinese side consisting of 11 CAEP staff. In addition to participating in the general trainings, they also received special training aiming at qualifying them to become trainers in the core project topics. Also here, we did a baseline survey and final survey of skills levels. The average results include all members of the core project group during the project, and it may be noted that more than 50% of participants in the core group shifted in the course of the project. Nevertheless, the survey (ref. table A above) shows consistent improvement on all topics, with an overall development from a familiar to theoretical knowledge level (2 and 3) in 2013, to applicable or expert (4 or 5) in 2016.

The project has had impact on the practise of government officials

The participants were asked in the final survey whether the training and international experience received through the project had been helpful in their everyday work. They were also asked if the training and international experience received through the project had made them do things differently in their work, and asked to provide an example. 99% responded yes to the first of these questions, and 87% to the other. Only at the provincial level (14%) and the city level (20%) did some respondents note that the project had not made them do things differently.

There is a need to expand on methods and tools to manage environmental risk

In the surveys, we also asked a general question aimed at assessing whether current methods and tools used in work on environmental planning and/or emergency response are considered sufficient. Project participants were asked to reply on a scale from 1-5 (1= "they are not at all sufficient", 5 = "they fully cover my needs"). The survey showed that 30% regarded the sufficiency of current methods and tools somewhat positively (answer of 3, 4 or 5), and that this had increased to 64% in 2016. The rating is similar among the different groups and the survey indicates that there still is a need to improve and possibly expand the portfolio of methods and tools available for public officials working with environmental planning and risk management in China.

1. Introduction

1.1 Background and methodology

The Sino-Norwegian cooperation project "Planning for cost-effective environmental risk reduction" (2013-2016) involves capacity building of governmental staff working with environmental planning and emergency management in China. In order to monitor knowledge development in the target group, a mapping survey was carried out at the beginning and at the end of the project. The baseline survey is available in Vista report 2013/37 "Baseline Study of Environment Planning and Risk Management in China".[1] The two questionnaires are included as appendices to this report (chapter 5).

The target group of the project was in 2013 defined to consist of 103 persons from MEP/CAEP (27), provincial EPBs in Jiangsu and Guizhou (49), and city EPBs in Tongling and Anshun (27) – simply all staff the involved units at the time (ref. Vista Analyse 2013/37). There is also a core target group consisting of staff from CAEP, that has implemented the project in cooperation with Vista Analysis and who has received special training aimed at qualifying CAEP staff to be future trainers that can provide training in the main topics of the project such as CBA, SEA, GAINS and relevant international experiences.

The mapping consisted of self-reporting from project participants, using questionnaires. 90% of those who filled in the first baseline questionnaire also filled out the final questionnaire. The mapping was carried out by CAEP, with guidance from Vista Analysis. There are drawbacks with using self-reporting to measure knowledge development, such as a risk of participants not reporting honestly or accurately due to possibilities for different interpretations and/or different degrees of self-knowledge in the target group. A relatively long time span of three years between filling out the first questionnaire and the last, may also lead to participants applying different standards at the two occasions, simply because they have forgotten what they applied the first time. Finally, a development in knowledge levels may also be attributed to other factors than this project and we have in the surveys not attempted to investigate that in depth.

In the final survey we had some respondents that did not participate in the training activities and that provided an opportunity to compare knowledge levels of participants versus non-participants at CAEP and in provinces in some instances. In these cases, the numbers indicate that there has been a general improvement of knowledge levels at CAEP and in provinces, but that project participants have even higher knowledge levels. It should be noted, however, that these non-participants have replied to the final survey due to interest in the topic/project and may not be representative of the general situation in these institutions. All in all we consider that the surveys give a robust indication of the impact of the capacity building activities on the target group of the project.

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[1] All Vista reports are available at the Vista Analysis website: www.vista-analyse.no/en

It is worth noting that when conducting the final survey, we received a number of responses from staff at MEP/CAEP who had not participated in the project (ref. figure 3 below). In the final survey, they consistently score higher than the target group did in 2013, but significantly lower than the target group participants who had been involved in the project. There is a chance that the non-participants who filled out the survey are above average interested and competent in the topics of the project. Still, the differences between the non-participant and the participant groups indicates that even though there may have been a general increase in knowledge about project topics at MEP/CAEP during the period of the project, the project participants have developed their knowledge even further than this.

1.2 Basic information of the final survey

The final survey introduced an online form[1] with the purpose to save the paper and achieve a higher responding rate.

Figure 1: Screenshot of online form for final survey

In total CAEP received 121 responses in the final survey, which was carried out in January 2016. However, only 82 persons had participated in the project. (The other respondents were staff at MEP/CAEP that happened to receive the on-line survey and filled it in). Most of the target group of the baseline report conducted the evaluation form again; 76 persons - about 90% of the 83 respondents in the baseline survey). Among the total 121 questionnaires we received, MEP staff submitted 17, CAEP staff submitted 32, provincial agencies submitted 46 (Jiangsu 20 and Guizhou 26), and local EPBs (Tongling and Anshun) and others submitted 26 (ref. figure 2.)

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[1] http://wj.qq.com/survey.html?id=247716&hash=ec28

Figure 2: Distribution of respondents, final survey
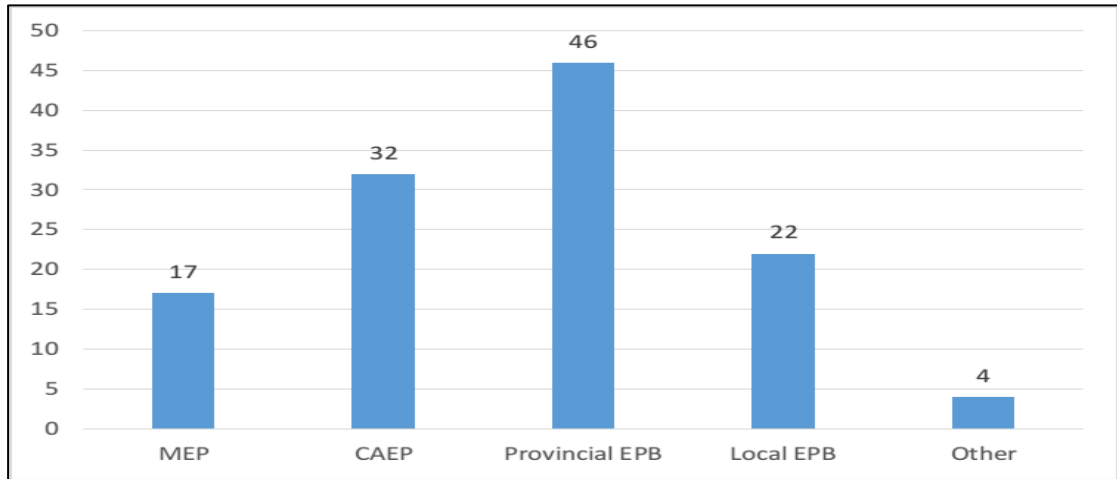
1.3 Number of project participants in the final survey

To be considered a participant, a respondent should have taken part in project activities, such as discussions, training, report drafting, data analysis.

68% of respondents (82 persons) to the final survey indicated that they have been involved in activities of this project. Breakdown of distribution is indicated in Figure 3. Most non-participant respondents are from MEP and CAEP.

Figure 3: Distribution breakdown of participant, final survey 2016
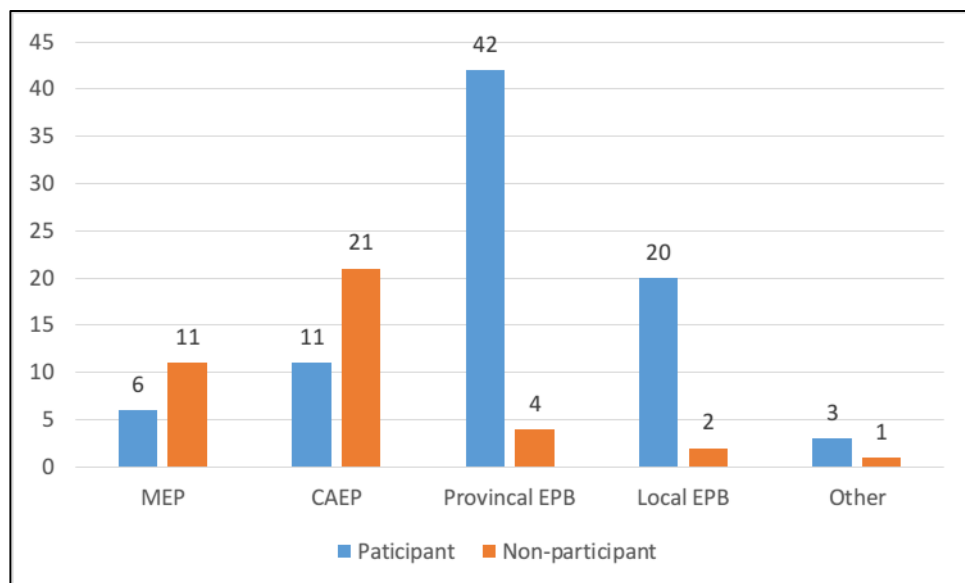
86% of respondents answered that environmental planning is part of their job responsibilities. 66% of respondents replied that environmental risk management is part of their job responsibilities.

2. Development in knowledge levels

2.1 Overview of main topics

A comparison of the two surveys – the baseline survey and the final survey – shows a consistent and substantial positive development of knowledge in the target group.

In the survey we distinguished between 5 knowledge levels; Level 1 = No knowledge, Level 2 = Basic knowledge (familiarity), Level 3 = Theoretical knowledge, Level 4 = Application level knowledge, and 5 = Expert level knowledge.

In the survey we asked respondents to rank their knowledge of main topics in the project: Cost Benefit Analysis (CBA), Strategic Environmental Assessment (SEA), environmental risk reduction methodologies, as well as international experience with environmental planning and environmental risk reduction methodologies.

Figure 4: Development in knowledge levels, 5 main topics aggregated (in % of group)
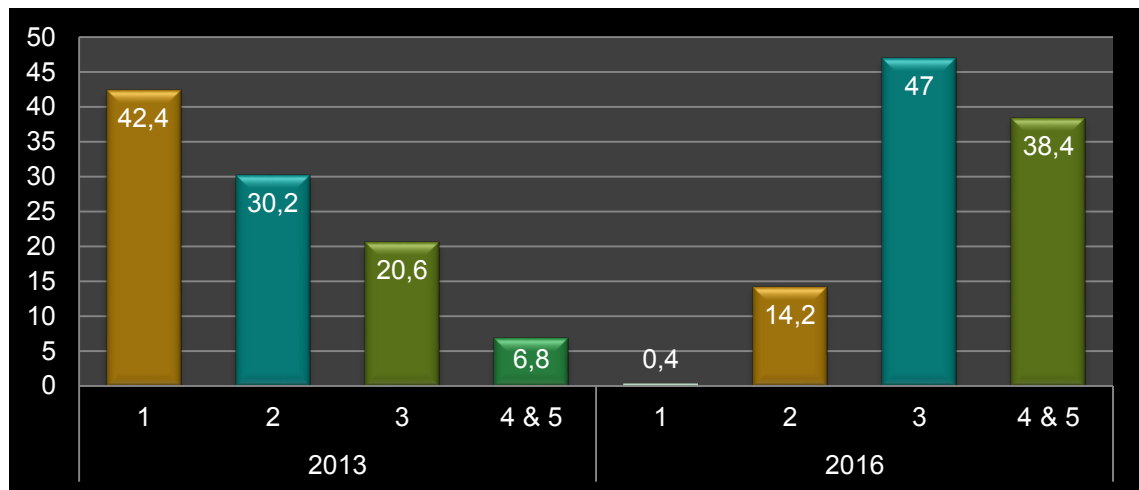
When we aggregate the responses on these five topics, we see that the percentage stating their knowledge level is either 3 (theoretical), 4 (applicable) or 5 (expert) has risen from 27% to 85% (ref. figure 4 below). Moreover, the percentage stating that their knowledge level is either 4 or 5 has risen from 7% to 38%.

As shown in figure 5 below, the increase in knowledge levels generally shows the same positive pattern for the different main topics: CBA, SEA, environmental risk reduction methodologies, and international experience with environmental planning and environmental risk reduction methodologies.

Figure 5: Development in knowledge levels, different topics (in % of group)
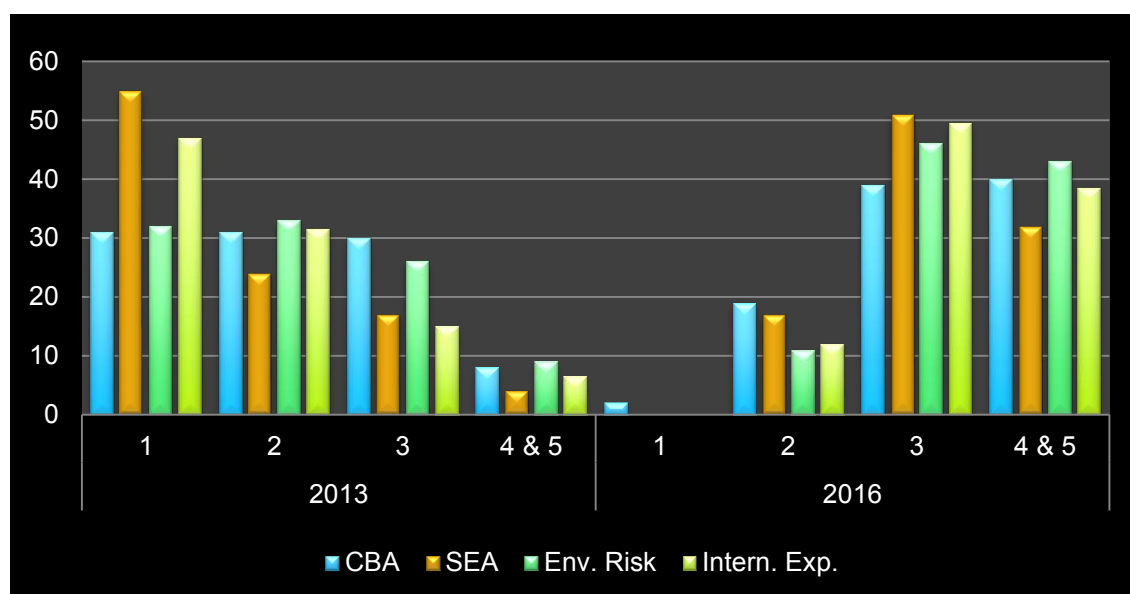
We do, however, see differences between the main groups of the project; government officials at central level (MEP/CAEP), provincial level (Jiangsu and Guizhou) and local city level (Tongling and Anshun), ref. figure 6.

Figure 6: Development in knowl. levels, main topics (aggregated) by groups (% of group)

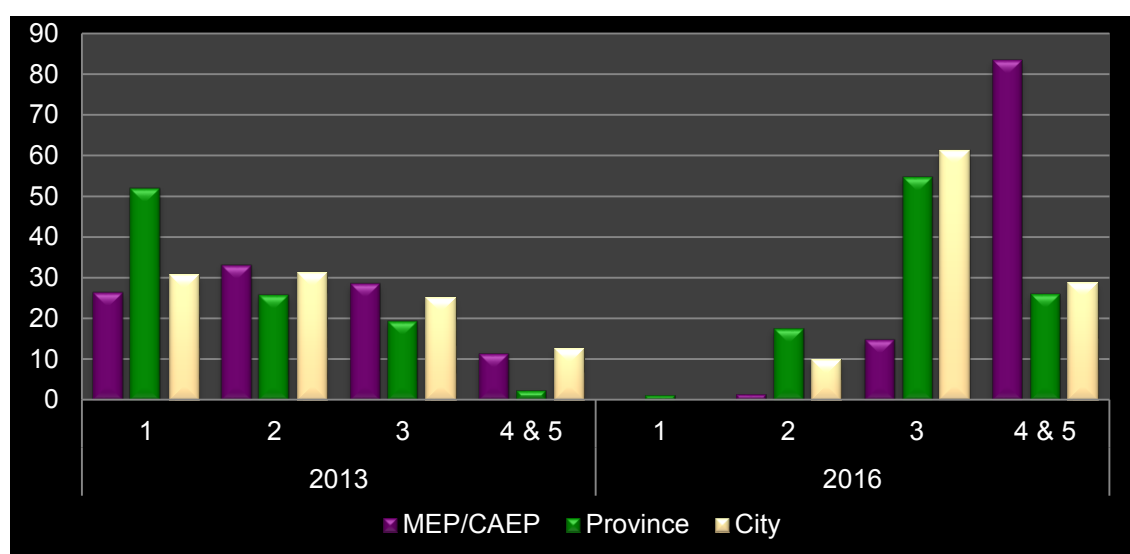The general picture is that especially the MEP/CAEP staff has benefited from the project. Improvement for provincial and city/local staff is also high. The participants from MEP/CAEP at the beginning of the project generally had a medium to high knowledge level (+70% on level 2 and above) of the main topics and that the whole group has risen to applicable or expert level. The provincial group had generally a relatively low level of knowledge (50% on level 2 and above), and 80% of the group has risen to applicable level or above. The city/local group also had a medium to high knowledge level (70% on level 2 and above), and 90% of the group has risen to achieving applicable or expert level. It is surprising that the city/local participants score higher than provincial participants, as it goes against the general impression that provincial participants have higher skills levels. (It may simply be due to different standards for self-reporting, as the difference is not very big – but consistent.)

2.2 Knowledge level of CBA

The participants have made great progress in CBA after the training. According to the survey result, each group has made outstanding achievement in the knowledge level of CBA approach. In general, the ratio of 'no knowledge' has been reduced to 2% from 31%, and 82% of MEP and CAEP respondents chose the score of 4 or 5. For the provincial and local environmental authorities, the percent of trained respondents choosing the score of 3, 4 or 5 increased from 35% to 76% (province) and 63% to 80% (city/local).

Figure 7: Share with no knowledge of CBA

	MEP/CAEP	Province	Local	All groups
2013	17	42	12	31
2016(trained)	0	5	0	2
2016(not trained)	6	25	50	10
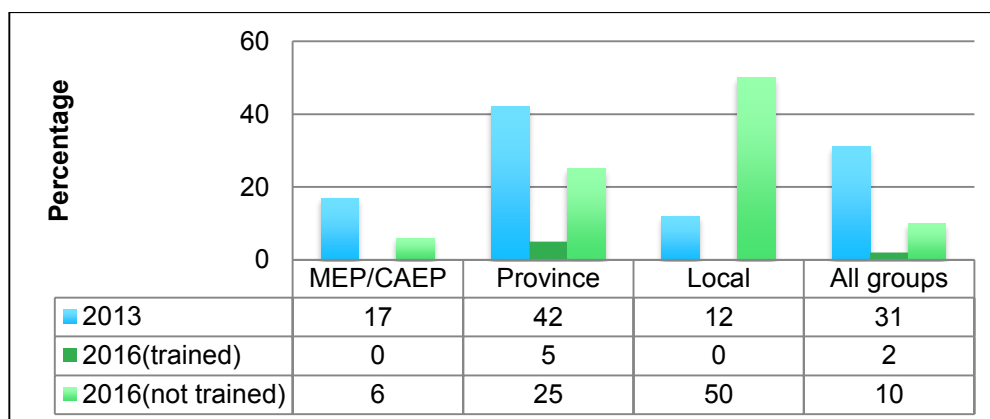
Figure 8: Share with 3, 4, or 5 knowledge of CBA

	MEP/CAEP	Province	Local	All groups
2013	33	35	63	38
2016(trained)	94	76	80	79
2016(not trained)	75	25	0	64
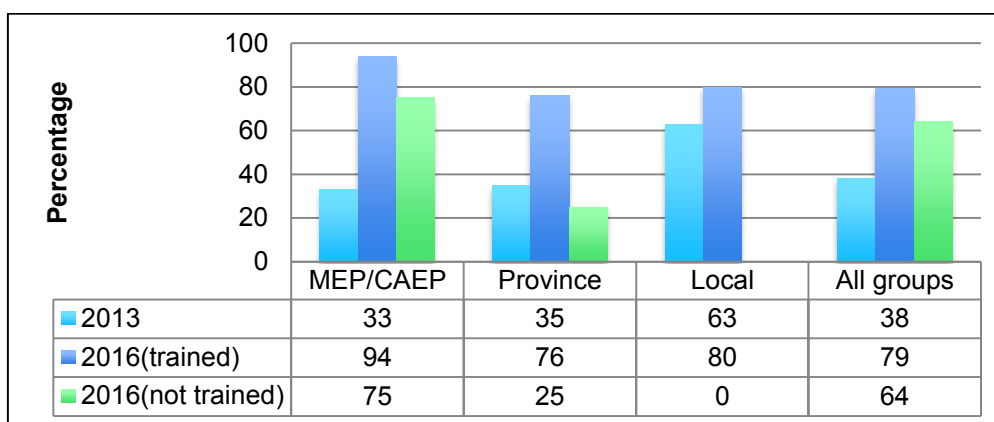
Figure 9: Share with 4 or 5 knowledge of CBA

	MEP/CAEP	Province	Local	All groups
2013	4	4	38	8
2016(trained)	82	29	35	40
2016(not trained)	38	0	0	31
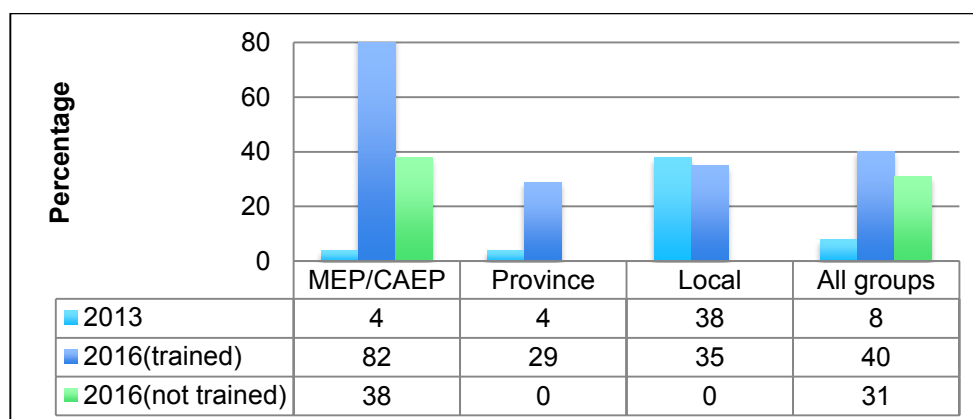
Those who have participated in the project present higher knowledge level of CBA. According to the survey result, the CBA level of the participants is generally higher than the non-participants. The share with no knowledge of CBA among participants is 2%, however 10% in non-participants. And there are more respondents who chose 3, 4, or 5 in participants than in non-participants group.

2.3 Knowledge level of SEA

The participants have made great progress in SEA after the training. According to the survey result, environmental authorities and agencies has made outstanding achievement in the knowledge level of SEA approach.

In general, the ratio of 'no knowledge' has reduced to 0% from 55%, and 82% of MEP and CAEP respondents chose the score of 4 or 5 in 2016. The provincial and local environmental authorities also have made great progress in SEA, for example, the share with 3, 4, or 5 knowledge of SEA in provincial respondents is increased from 17% to 76%, and from 13% to 90% among local respondents.

Figure 10: Share with no knowledge of SEA

	MEP/CAEP	Province	Local	Total
2013	43	64	37	55
2016(trained)	0	0	0	0
2016(not trained)	9	25	0	10
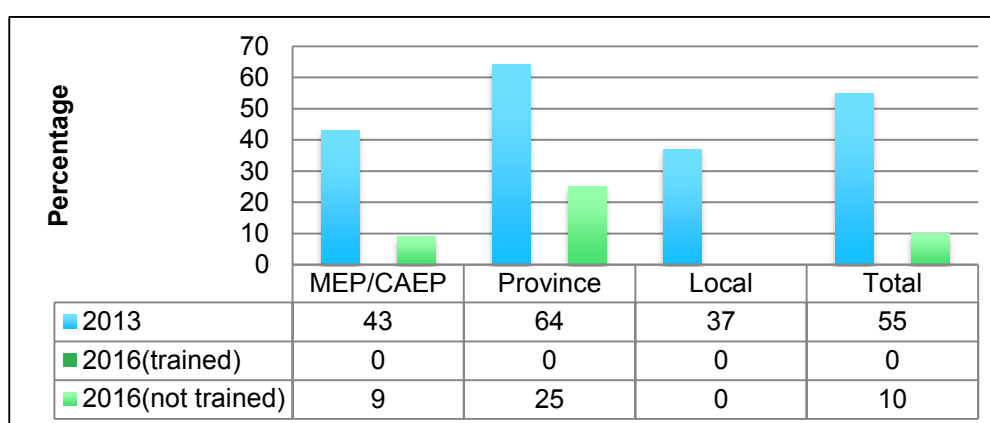
Figure 11: Share with 3, 4 or 5 knowledge of SEA

	MEP/CAEP	Province	Local	Total
2013	32	17	13	21
2016(trained)	100	76	90	83
2016(not trained)	69	25	0	59
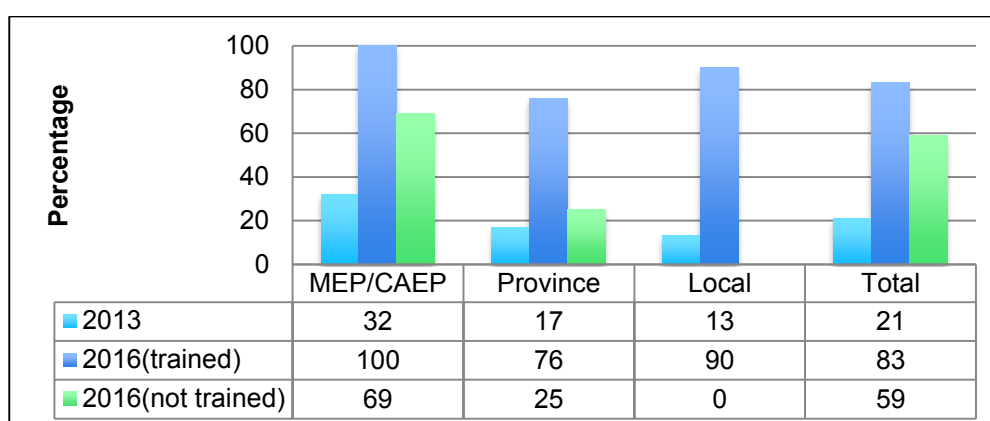
Figure 12: Share with 4 or 5 knowledge of SEA

	MEP/CAEP	Province	Local	Total
■ 2013	14	0	0	4
■ 2016(trained)	82	19	20	32
■ 2016(not trained)	38	0	0	31
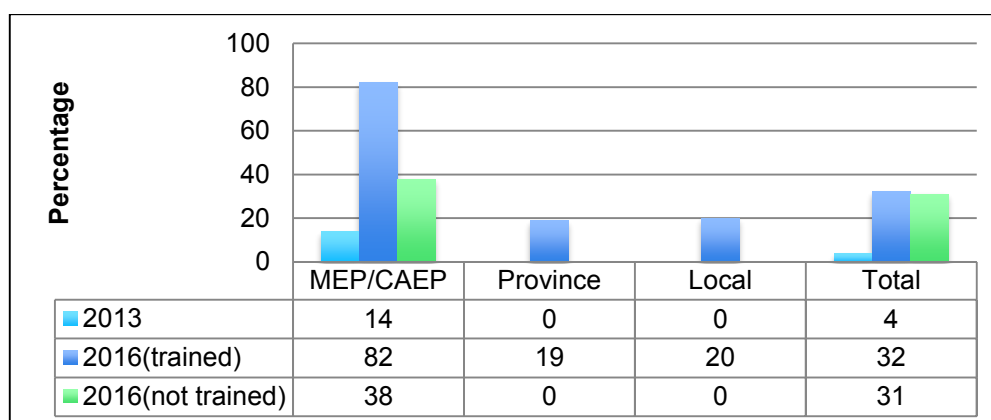
Those who have participated in the project present higher knowledge level of SEA. For example, according to the survey result, the SEA knowledge level of the participants is generally higher than that of the non-participants. The share with no knowledge of SEA is 0% in participants, however 10% in non-participants. And there are more respondents who chose 3, 4, or 5 in participants than in non-participants.

2.4 Knowledge level, international experience with environmental planning

The participants have made great progress in international experience and best practice related to environmental planning, after the training. According to the survey result, each group has made outstanding achievement in the knowledge level of international experience and best practice. In general, the ratio of 'no knowledge' has been reduced to 0% from 49%, and 82% of MEP and CAEP respondents chose the score of 4 or 5 in 2016. For the provincial environmental authorities, 86% of respondents chose the score of 3, 4, or 5, and 24% chose 4 or 5 in 2016, which is much higher compared to the share in 2013. Similarly, the local environmental authorities have made great progress.

Those who have participated in the project show higher knowledge level of international experience and best practice of environmental planning. According to the survey result, the participants' knowledge level of international experience and best practice is generally higher than the non-participants'. The share with no knowledge of international experience and best practice is 0% among training participants, compared to 18% among non-participants. And there are more respondents who chose 3, 4, or 5 among participants than among non-participants.

Figure 13: Share with no knowledge of international experience env. planning

	MEP/CAEP	Province	Local	All groups
■2013	28	58	62	49
■2016(trained)	0	0	0	0
■2016(not trained)	9	50	50	18
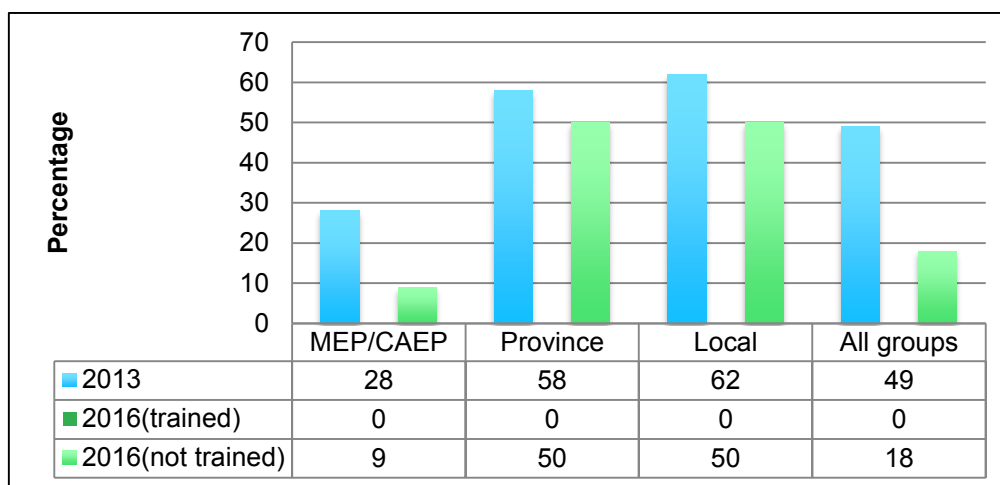
Figure 14: Share with 3, 4 or 5 knowledge of international experience env. planning

	MEP/CAEP	Province	Local	All groups
■2013	43	17	13	25
■2016(trained)	100	86	95	88
■2016(not trained)	63	0	0	51
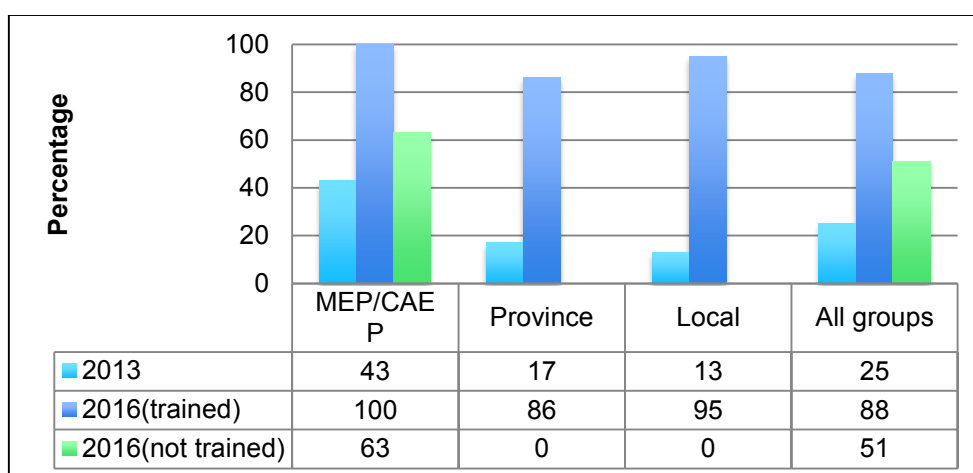
Figure 15: Share with 4 or 5 knowledge of international experience env. planning

	MEP/CAEP	Province	Local	All groups
■2013	11	4	0	6
■2016(trained)	82	24	30	37
■2016(not trained)	19	0	0	15
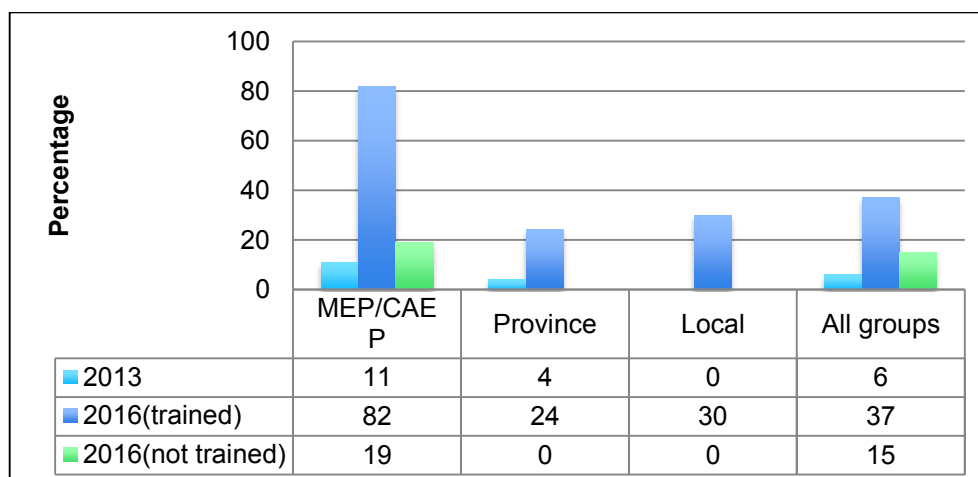
2.5 Knowledge level of environmental risk reduction methodologies

The participants have made great progress in environmental risk reduction methodologies after the training. According to the survey result, each group has made outstanding achievement in the knowledge level of environmental risk reduction methodologies. In general, the ratio of 'no knowledge' has been reduced to 0% from 32%, and 88% of MEP and CAEP respondents chose the score of 4 or 5 in 2016. For the provincial environmental authorities, 86% of respondents chose the score of 3, 4, or 5, and 33% chose 4 or 5, which is much higher compared to the share in 2013. Similarly, the local environmental authorities have made great progress.

Those who have participated in the project show higher knowledge level of environmental risk reduction methodologies. According to the survey result, the share with no knowledge of environmental risk reduction methodologies is 0% among participants, compared to 10% among non-participants. And there are more respondents who chose 3, 4, or 5 among participants than among non-participants, meaning their related knowledge level has been greatly improved.

Figure 16: Share with no knowledge of environmental risk reduction methodologies

	MEP/CAEP	Province	Local	All groups
2013	18	44	12	32
2016(trained)	0	0	0	0
2016(not trained)	9	0	50	10
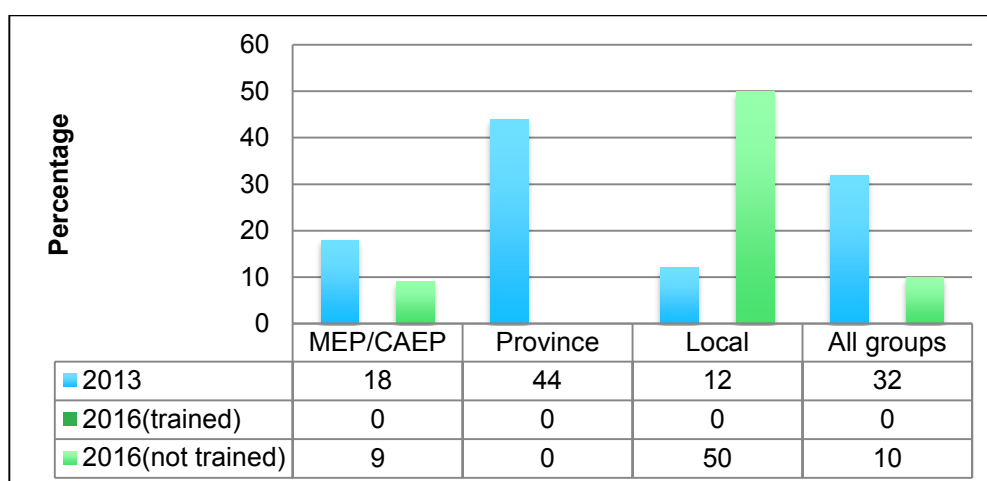
Figure 17: Share with 3, 4, or 5 level knowledge of env. risk reduction methodologies

	MEP/CAEP	Province	Local	All groups
2013	53	19	63	35
2016(trained)	100	86	95	89
2016(not trained)	75	50	0	67
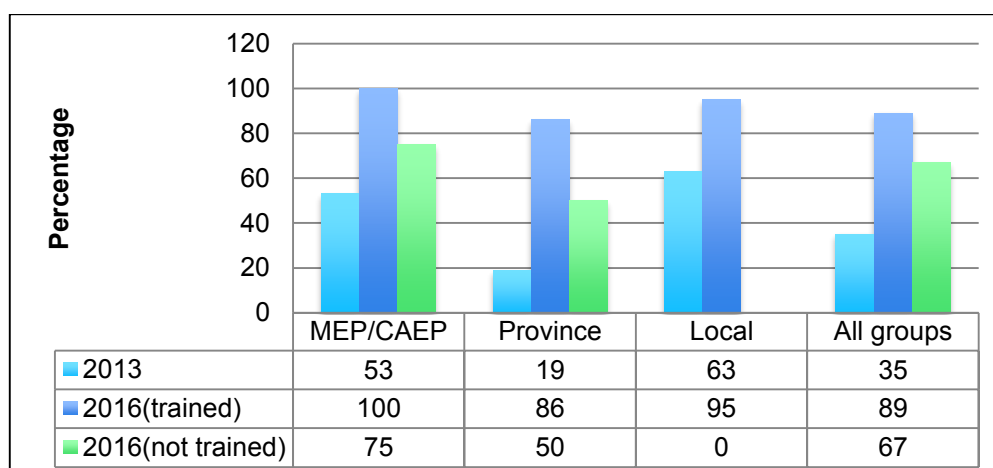
Figure 18: Share with 4 or 5 level knowledge of env. risk reduction methodologies

	MEP/CAEP	Province	Local	All groups
2013	17	2	13	9
2016(trained)	88	33	30	43
2016(not trained)	34	0	0	28
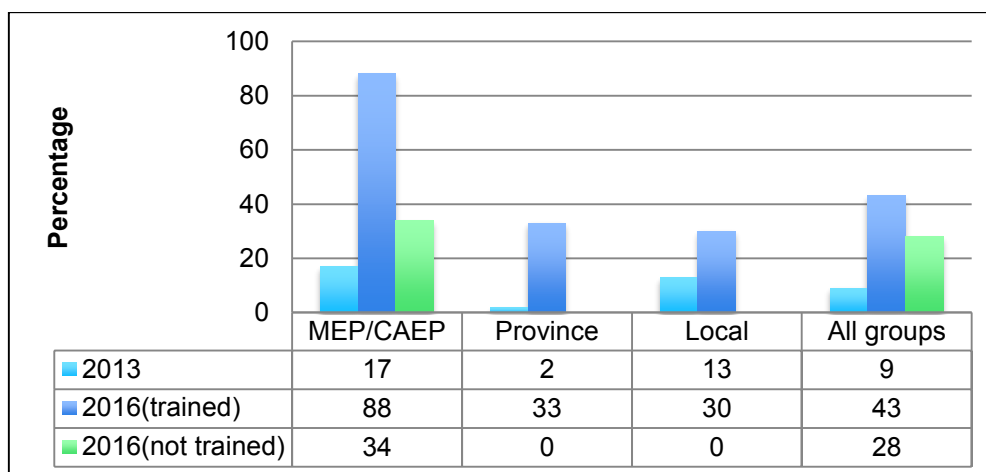
2.6 Knowledge level, international experience with environmental risk reduction

The participants have made great progress in knowledge of international experience and best practice of environmental risk reduction after the training. According to the survey result, each group has made outstanding achievement in the knowledge level of international experience and best practice of environmental risk reduction methodologies. In general, the ratio of 'no knowledge' has been reduced to 0% from 45%, and 100% of MEP and CAEP respondents chose the score of 4 or 5 in 2016. For the provincial environmental authorities, 83% of respondents chose the score of 3, 4, or 5, and 24% chose 4 or 5 in 2016, which is much higher compared to the share in 2013. Similarly, the local environmental authorities have made great progress.

Figure 19: Share with no knowledge of international experience

with environmental risk reduction methodologies

	MEP/CAEP	Province	Local	All groups
■ 2013				45
■ 2016(trained)	0	0	0	0
■ 2016(not trained)	9	50	50	15
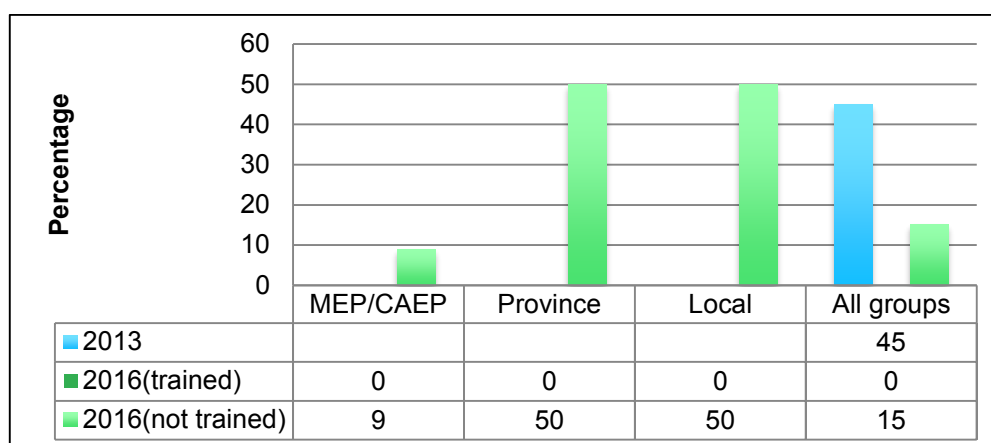
Figure 20: Share with 3, 4 or 5 knowledge of international experience

with environmental risk reduction methodologies

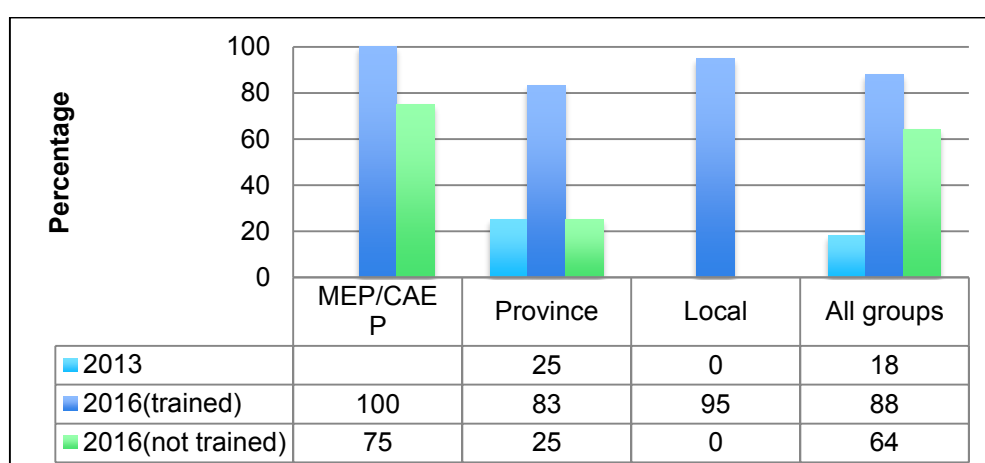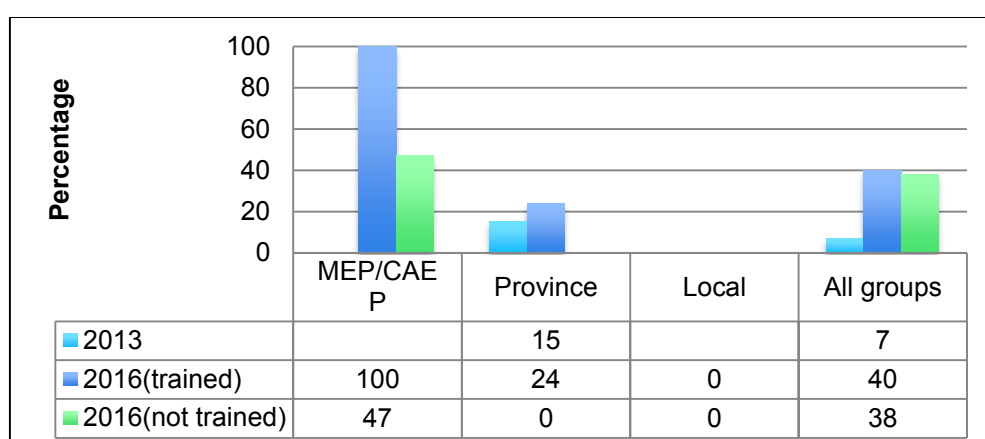|	MEP/CAEP	Province	Local	All groups
■ 2013		25	0	18
■ 2016(trained)	100	83	95	88
■ 2016(not trained)	75	25	0	64

Figure 21: Share with 4 or 5 knowledge of international experience

with environmental risk reduction methodologies

|	MEP/CAEP	Province	Local	All groups
■ 2013		15		7
■ 2016(trained)	100	24	0	40
■ 2016(not trained)	47	0	0	38

Those who have participated in the project show higher knowledge level of international experience and best practice of environmental risk reduction. According to the survey result, the share with no knowledge is 0% among participants, compared to 15% in non-participants. And there are more respondents who chose 3, 4, or 5 among participants than among non-participants, meaning their related knowledge level has been greatly improved.

2.7 Knowledge level of GAINS and CGE models

The project also had a focus on training related to use of GAINS and computable general equilibrium (CGE) models, especially MSG-6 developed by Statistics Norway. This training was mainly aimed at CAEP staff, and was not included in the training sessions held for the pilot provinces and cities.[1] Survey results (ref. figure 22 below), show a signifant increase in knowledge levels at the CAEP/MEP level where more than 90% have reached a theoretical level of knowledge or more and 60% have an applicable level of knowledge. Also provinces and cities have clearly benefited from the training related to GAINS and MSG-6.

Figure 22: Development in knowledge of GAINS and MSG-6 methodologies, by main groups (in % of group)
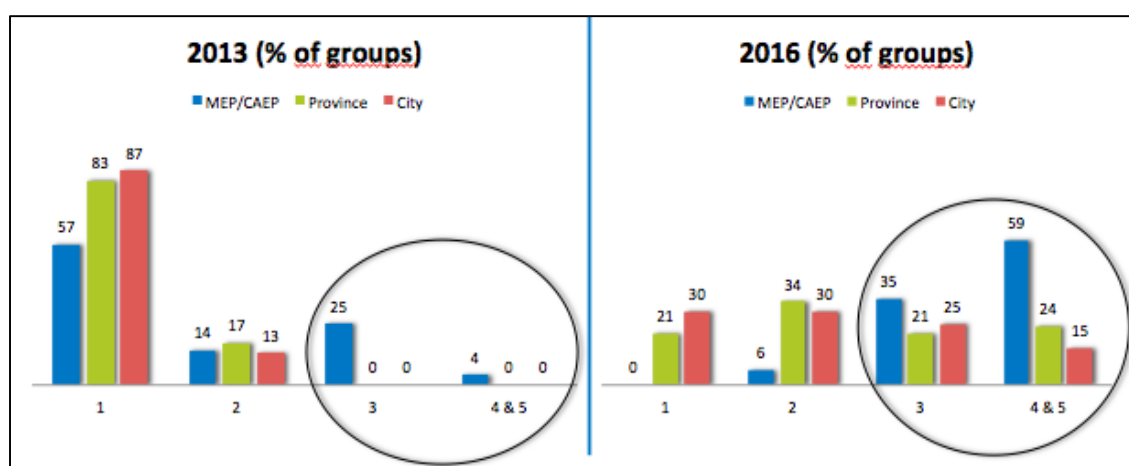
On average, the ratio of 'no knowledge' has been reduced from 75% to 18%. 59% of MEP and CAEP respondents chose the score of 4 or 5 in 2016, up from a mere 4% in 2013. For the provincial environmental authorities, 45% of respondents chose the score of 3, 4, or 5, and 24% chose 4 or 5, which is much higher compared to the share in 2013.

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[1] For further details, see Vista report 2016/12 "Planning for cost-.effective environmental risk reduction in China: Training plan and activities (2013-2016)" which describes the capacity building activities of the project.

2.8 Knowledge level of the core project target group at CAEP

In the project, there was a core project group on the Chinese side consisting of 11 CAEP staff (including new staff that replaced team members that were shifted to other units during the project). In addition to participating in the general trainings, they also received special training aiming at qualifying them to become trainers in the core project topics.

Also here, we did a baseline survey in 2013 and a final survey of skill levels in 2016. The average provided in table 1 below, includes all members of the core project group during the project. It may be noted that more than 50% of the participants in the core group shifted in the course of the project, and that many of the 11 thus did not have opportunity to participate in the full course of the project. Nevertheless, the survey shows consistent improvement on all topics and the core group as a whole has reached knowledge levels of 4 (applicable) or 5 (expert) in all topics.

Table 1: Knowledge level of CAEP trainers; baseline (B) and at end of project (E)

Name	Degree of knowledge of								
	CBA		SEA		Int. experience with env. planning		Int. experience with env. risk management		GAINS	
	B	E	B	E	B	E	B	E	B	E
Average score	3.2	4.5	2.3	4.2	2.8	4.1	2.5	4.8	1.8	3.6

2.9 Other findings

2.9.1 The project has had impact on the practise of government officials

The participants were asked in the final survey whether the training and international experience received through the project had been helpful in their everyday work. They were also asked if the training and international experience received through the project had made them do things differently in their work, and asked to provide an example. 99% responded yes to the first of these questions, and 87% to the other. Only at the provincial level (14%) and the city level (20%) did some respondents note that the project had not made them do things differently.

2.9.2 There is a need to expand on methods and tools

In the surveys, we also asked a general question aimed at assessing whether current methods and tools used in work on environmental planning and/or emergency response are considered sufficient. Project participants were asked to reply on a scale from 1-5 (1= "they are not at all sufficient", 5 = "they fully cover my needs").

The survey showed that 30% regarded the sufficiency of current methods and tools somewhat positively (answer of 3, 4 or 5) in 2013, and that this had increased to 64% in 2016. The change in rating is similar among the different groups (ref. figure 23-25 below) and the survey indicates that there still is a need to improve and possibly

expand the portfolio of methods and tools available for public officials working with environmental planning and risk management in China.

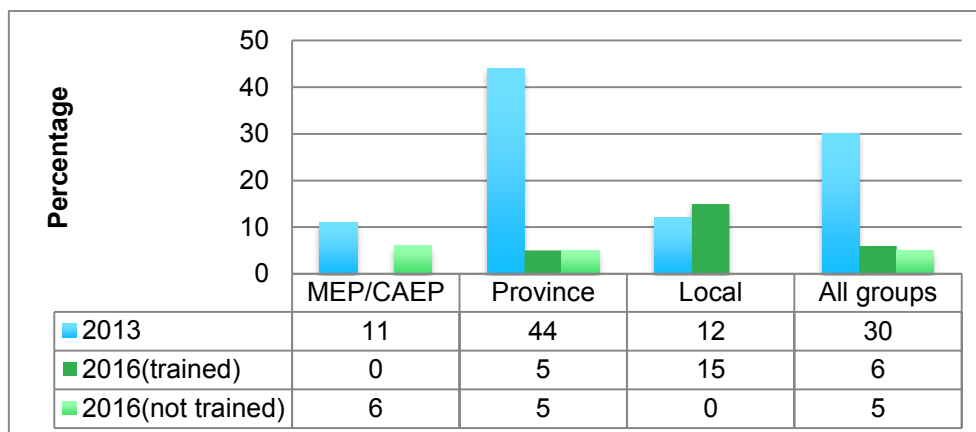**Figure 23: Share not satisfied with available methods and tools**

	MEP/CAEP	Province	Local	All groups
2013	11	44	12	30
2016(trained)	0	5	15	6
2016(not trained)	6	5	0	5

Figure 24: Share with 3, 4 or 5 satisfaction of methods and tools

	MEP/CAEP	Province	Local	All groups
2013	43	27	26	31
2016(trained)	70	62	70	64
2016(not trained)	53	62	0	46
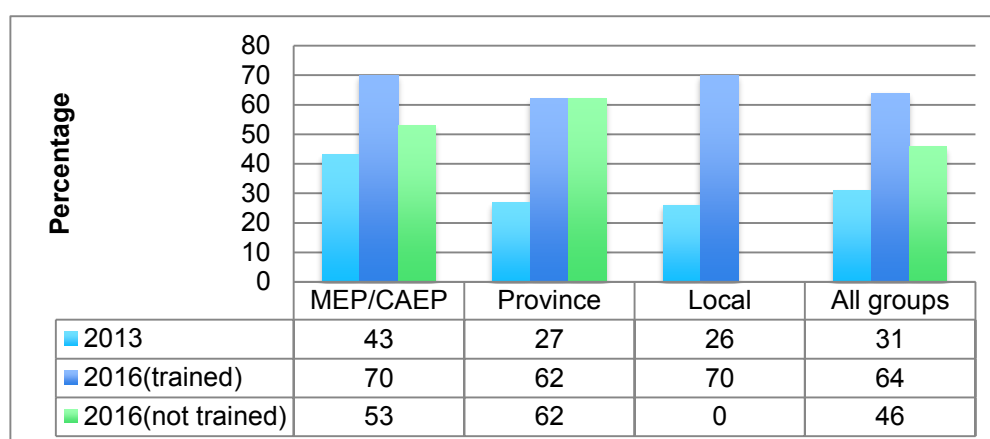
Figure 25: Share with 4 or 5 satisfaction with methods and tools

	MEP/CAEP	Province	Local	All groups
2013	29	6	13	13
2016(trained)	29	14	25	20
2016(not trained)	16	14	0	13
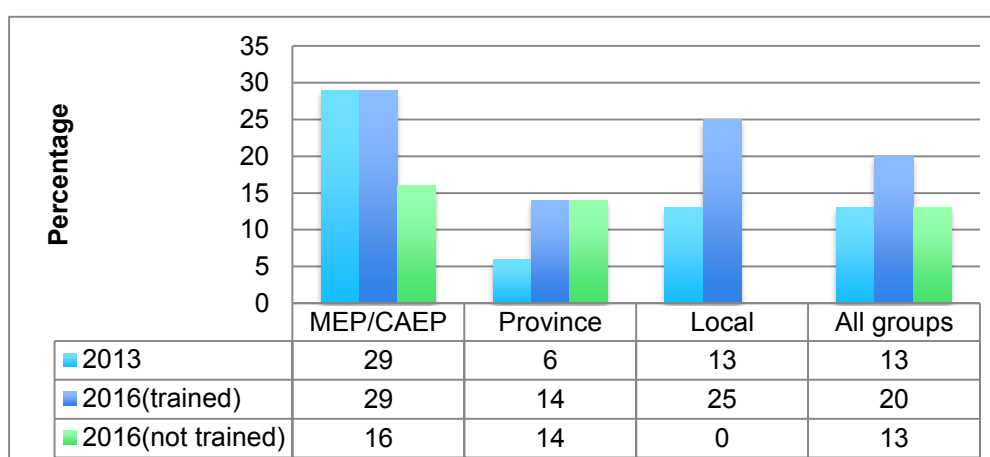
3. Final comments by CAEP

3.1 Abundant project achievement

Compared with the baseline survey when the project kicked off, the respondents from central, provincial and local levels all achieved great progress in understanding of CBA and SEA methodology, environmental risk control methodology and related international experiences. 99% of the respondents who have participated in the project reported that the project did benefit their daily work, and above 80% of the respondents reported that methodologies (CBA & SEA) that they learnt during the training could be used and referenced in their work. Therefore, the project has achieved targets to communicate and introduce international experiences, model methodologies and tools.

3.2 Respondents all have learning points

From the result of the survey, CAEP has noted that respondents from different organizations have different learning points due to the different focus of each organization. MEP and CAEP has put a lot of efforts on learning models, international experiences, and CBA/SEA methodology trainings, and therefore demonstrate high understanding in related questions. Provincial and local environmental institutes have achieved deeper understanding in overall methodology structure, international experiences, and risk control concepts in particular, and they have gained great progress in some basic methodology's application (risk control, SEA, CBA etc.).

Moreover, although 32% of the respondents of the final survey did not participate in the training and workshop, they show interests in this project and their understanding in environmental planning, risk control international experiences, methodology, model are all relatively lower compared with those who have participated in the project. This also, to some extent, demonstrates the achievements of this project and the necessity of continuously communicating project achievements and do follow-up research.

3.3 Further training and implementation

Although the achievements of this project is significant, there is a share of respondents from provincial and local level environmental protection agencies who think that the methodologies from the training did not significantly change their working style. There are mainly two reasons. The first is that work with environmental risk control has just started in China, and it needs a long time before people's understanding and application capability improves and effectively combines theory and real work. Secondly, it is because most of the participants in this project are practitioners in local environmental authorities, and they care more about implementation of the concept and theories, and look forward to getting easier and more stable application tools to directly benefit their work.

Therefore, in next-steps of the project and follow-up work, we need to think more about the real status of China, especially locally, and how to strengthen the research related to implementation of concept and theories. Besides training activities, it will be important to develop practical tools and provide effective and strong work foundation

for environmental practitioners at different levels that are working on environmental risk control, planning and emergency management.

4. Appendices: Questionnaires

4.1 Questionnaire for baseline survey (2013)

First Questionnaire, at beginning of project

Please mark the right answer with "X"

	Question	Answer	
1.	Do you work for MEP, CAEP, provincial authorities or a city/municipality?	*MEP*	____
		CAEP	____
		Province	____
		City	____
2.	Is development of environmental plans part of your job responsibilities? (Yes/No)	____ ____ *(Yes) / (No)*	
3.	Is emergency response to environmental risks part of your job responsibilities? (Yes/No)	___ ____ *(Yes) / (No)*	
4.	Do you carry out analysis of cost-effect as part of your job responsibilities? (Yes/No)	____ ____ *(Yes) / (No)*	
5.	Please rank your present level of knowledge of cost-effect analysis on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
6.	Do you carry out Strategic Environmental Assessments (SEA) as part of your job responsibilities? (Yes/No)	____ ____ *(Yes) / (No)*	
7.	Please rank your present level of knowledge of SEA on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
8.	Please rank your present level of knowledge of international experiences and best practice related to environmental planning, on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
9.	Please rank your present level of knowledge and experience with environmental risk reduction methodologies, on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
10.	Please rank your present level of knowledge of international experiences and best practice related to environmental risk methodologies, on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
11.	Please rank your present level of knowledge about GAINS, CGE-models and other models for integrated evaluation of environmental impact, on a scale from 1- 5. (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
12.	Do you consider that the current methods and tools that you use in your work on environmental planning and/or emergency response fully cover your needs to solve tasks efficiently? (1= "they are not at all sufficient", 5 = "they fully cover my needs")	__ __ __ __ __ (1) (2) (3) (4) (5)	

13.	In your job, is there any specific type of international experience related to environmental planning or risk methodology that it would be particularly useful for you to learn more about? (Yes/No. If Yes, please describe it shortly below.)	____ / ____ *(Yes) / (No)*	

4.2 Questionnaire for final survey

<u>Last Questionnaire, at end of project</u>

Please mark the right answer with "X"

	Questions	Answer	
1.	Do you work for MEP, CAEP, provincial authorities or a city/municipality?	*MEP* *CAEP* *Province* *City*	____ ____ ____ ____
2.	Is development of environmental plans part of your job responsibilities? (Yes/No)	____ / ____ *(Yes) / (No)*	
3.	Is emergency response to environmental risks part of your job responsibilities? (Yes/No)	____ / ____ *(Yes) / (No)*	
4.	Please rank your present level of knowledge of cost-effect analysis on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
5.	Please rank your present level of knowledge of SEA on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
6.	Please rank your present level of knowledge of international experiences and best practice related to environmental planning, on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
7.	Please rank your present level of knowledge and experience with environmental risk reduction methodologies, on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
8.	Please rank your present level of knowledge of international experiences and best practice related to environmental risk methodologies, on a scale from 1-5? (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
9.	Please rank your present level of knowledge about GAINS, CGE-models and other models for integrated evaluation of environmental impact, on a scale from 1- 5. (1 = "no knowledge", 5 = "expert level of knowledge")	__ __ __ __ __ (1) (2) (3) (4) (5)	
10.	Do you consider that the current methods and tools that you use in your work on environmental planning and/or emergency response fully cover your needs to solve tasks efficiently? (1= "they are not at all sufficient", 5 = "they fully cover my needs")	__ __ __ __ __ (1) (2) (3) (4) (5)	
11.	Has the training and international experiences you have received through the project been helpful for you in your	____ ____	

	everyday work?	*(Yes) / (No)*
12.	Has the training and international experiences you have received through the project made you do things differently in your work? (If Yes, please give a short example below.)	____ ____ *(Yes) / (No)*

References

Vista Analyse (2013). *Baseline study of Environment Planning and Risk Management in China*. Report 2013/37. By Cao Guozhi et al.

Vista Analyse (2016): *Planning for cost-effective environmental risk reduction in China: Training plan and activities (2013-2016)*. Report 2016/12. By Rasmus Reinvang.