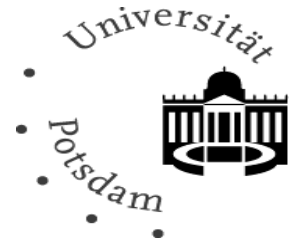


# Measuring the impact of Chinese provincial CDM Centres for local market development

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- Facilitating markets
- Measuring impacts

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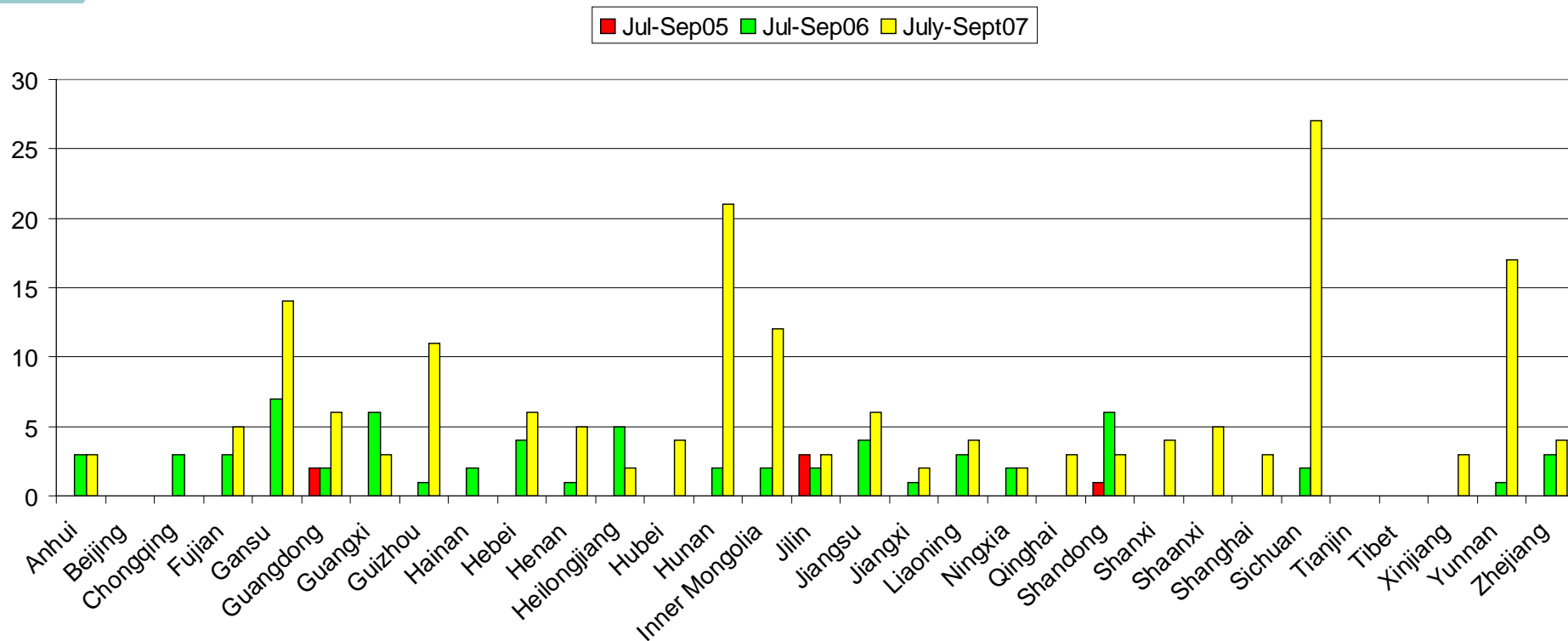
- Overview on CDM market
- Capacity development programmes
- CDM Centres' impact on market development

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- Methodological issues
- Transferability

# I. Background observation

After a slow start in 2005, Western provinces of China are catching up in terms of CDM project development.



# I. Research question

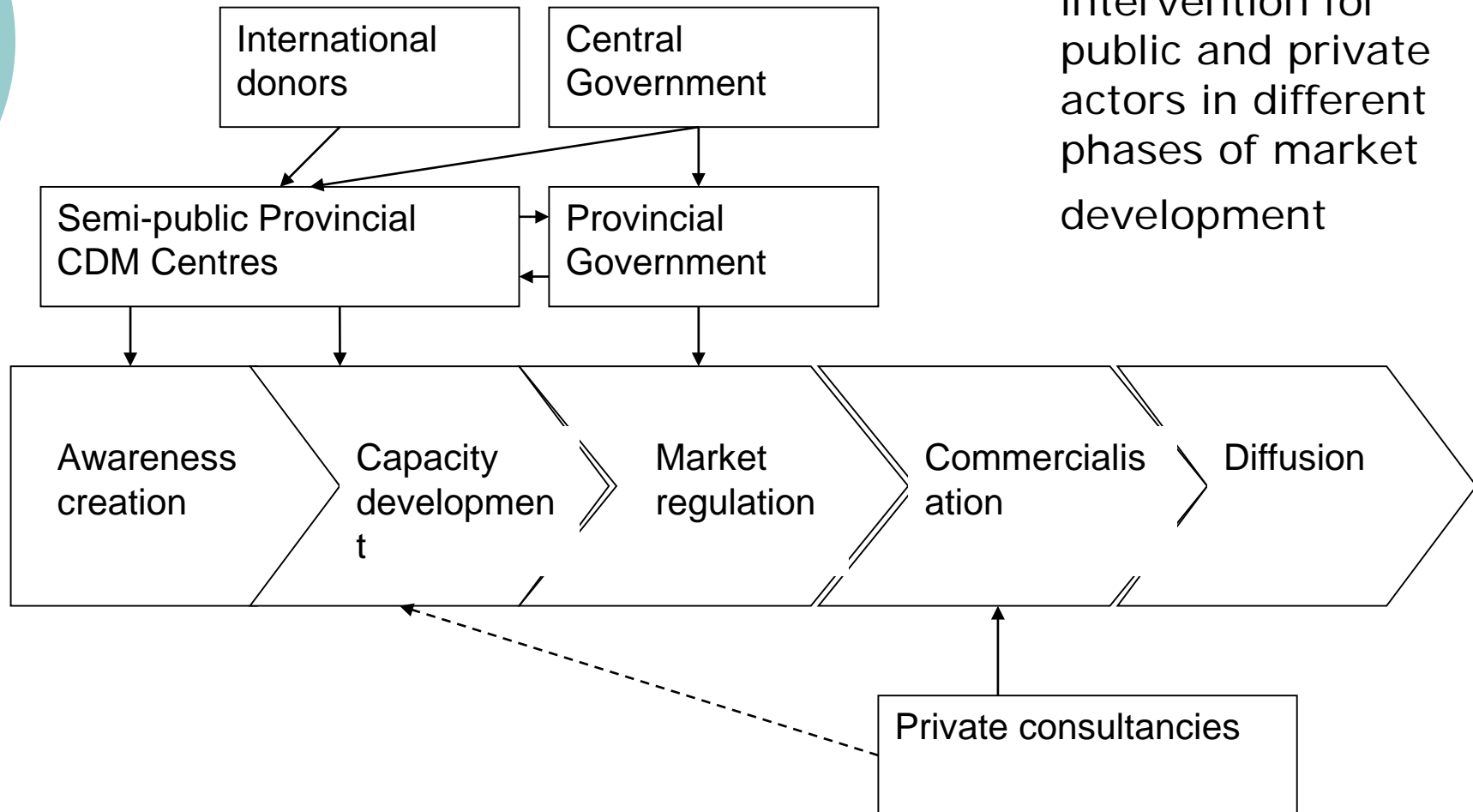
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*Assumption:* Provincial CDM Centres, supported by Sino-foreign capacity development programmes for the CDM (CD4CDM), have catalysed the development of local CDM markets.

*Research question:* What impact have the CDM Centers on the CDM market development in their province?

*Expected outcomes:* Lessons learned for local capacity building, esp. building local CDM market facilitation institutions. Possible transfer to other provinces/countries.

# I. Heuristic model



# I. Empirical research

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Interviews in Beijing, Shanghai, Ningxia, Gansu, Hunan and Yunnan in April 2007 and between September 2007 and February 2008 with:

- 6 donor countries and organisations
- 3 DOEs
- 9 Beijing-based project developers
- 4 Beijing-based buyers
- 4 representatives of the Chinese central government
- 7 representatives of the Ningxia, Gansu, Hunan and Yunnan CDM centres
- 7 representatives of the Chinese provincial governments
- 11 project owners
- 5 province-based project developers
- 2 province-based NGOs
- 2 researchers from provincial universities

# I. Case study selection

↑  
Increased relative performance of CDM Center

Province	Total no. of CDM projects	No. Developed by CDM Centre	Percentage
Ningxia	9	8	88%
Hunan	62	27	41%
Gansu	57	5	8%
Yunnan	80	1	0.01%





## II. Overview of CDM Centres' activities



	<b>Ningxia</b>	<b>Gansu</b>	<b>Hunan</b>	<b>Yunnan</b>
<i>Established in</i>	October 2003	October 2005	November 2005	January 2007
<i>Staff</i>	15	8	19	12
<i>Website</i>	2006	2006	2006	-
<i>Publications</i>	CDM handbook; 16 articles between May 05 – June06	CDM handbook	CDM handbook	CDM handbook
<i>Trainings/conferences</i>	6	9	9	3
<i>International cooperation</i>	Canada, UK, Italy, Japan	ADB	Canada	France
<i>Policy advice</i>	yes	Yes	yes	yes
<i>Other</i>			Software for calculating emission reductions; QQ online CDM advisory	

## II. Impact on awareness creation

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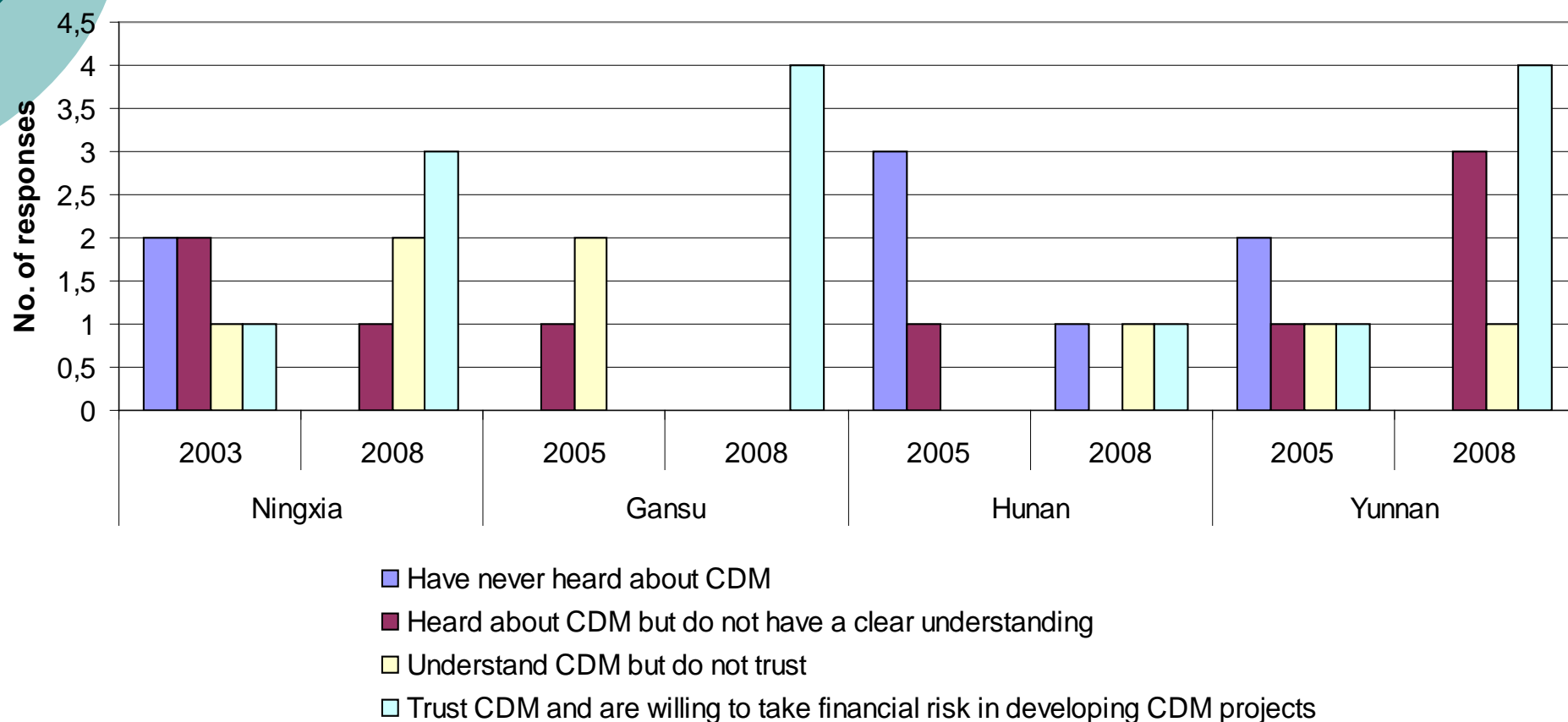
**Hypothesis 1:** *The CDM Centre have a direct impact on overcoming an information deficit, so that an increased awareness about the CDM is reached among potential project owners, government officials and financial institutions.*

**Outputs:** Information dissemination activities such as conferences, media publications, and propaganda.

**Outcome:** Potential project owners, governmental officials, and financial institutions have heard about the possibility of turning energy-related projects into CDM projects.

## II. Impact on awareness creation

### Change of CDM awareness among potential CDM project owners measured by peer group assessments



## II. Impact on awareness creation

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Correlation exists between timing of activities and interview statements on increased awareness, but also problem of small n and the ability to generalise responses.

Additional insights from interviews:

All CDM Centers are involved in organising provincial CDM conferences for spreading CDM awareness among local political leaders, industry and media representatives.

In general, the attachment to the provincial government helps the Centers to receive trust, which seems to be fundamental to project owners when deciding with whom to cooperate.

Private consultancies are preferred by project owners if these provide better quality trainings and information than the CDM Centers/provincial government.

## II. Impact on capacity development

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**Hypothesis 2:** *The CDM Centre can have a direct impact on overcoming a lack of CDM capacity, so that CDM experts in the province increase in numbers and in their ability to develop successful CDM projects.*

**Outputs:** Capacity development activities such as trainings and publication of CDM handbooks

**Outcomes:** Project owners know about the CDM requirements, the registration process and can access whether their project is CDM eligible. Project developers emerge and have sufficient qualification to develop CDM projects according to international requirements. Possible variance in no. of experts and their CDM capacity.

## II. Impact on capacity development

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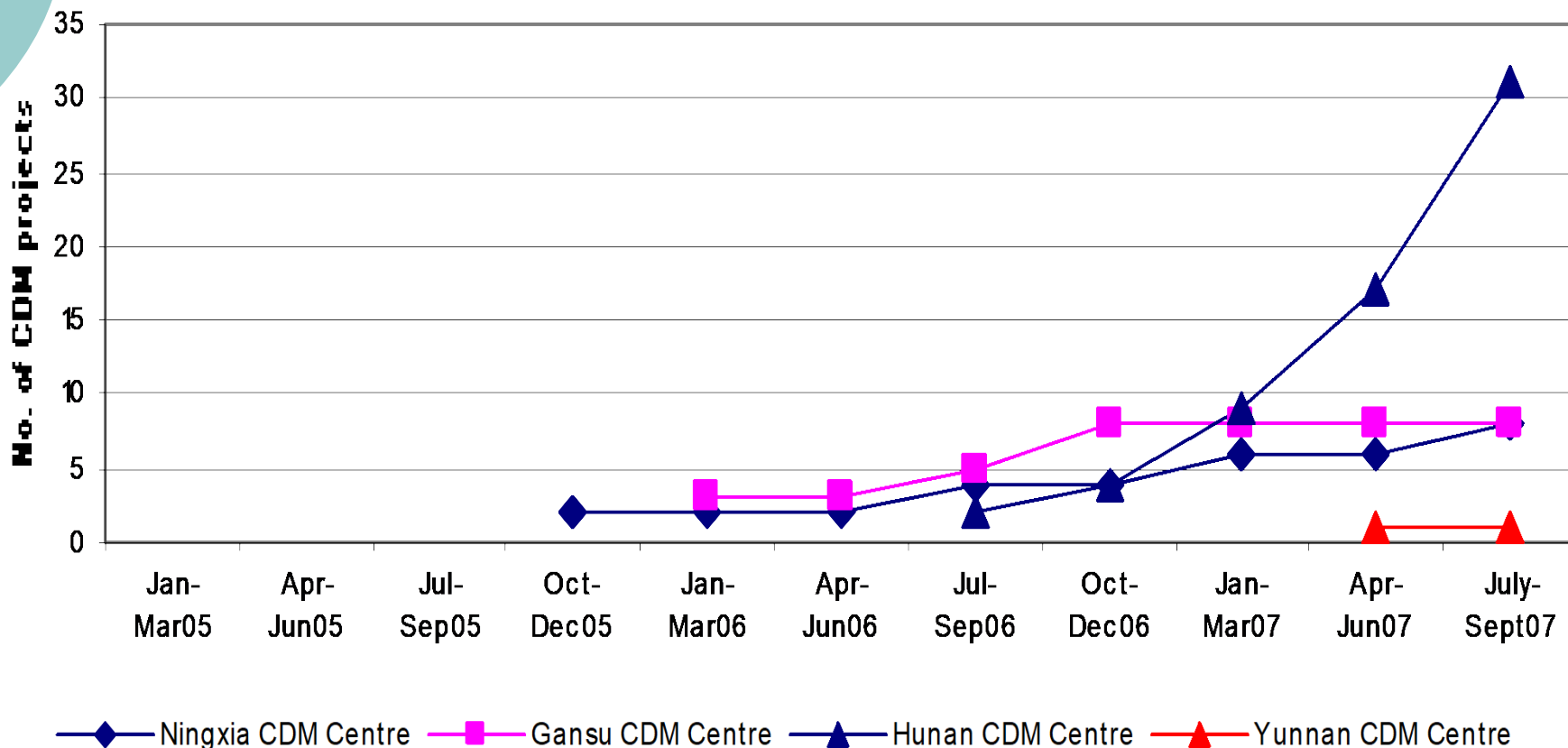
All CDM Centers organise provincial CDM trainings, but frequency and scope differs. Some only do “must do” trainings in the framework of their Sino-foreign programmes, some do trainings to get in touch with potential project owners and source projects.

Participants: project owners and government officials; neither financial institutions nor other project developers attend.

Trainings increase CDM project development capacity of CDM centre, because they can source more eligible projects.

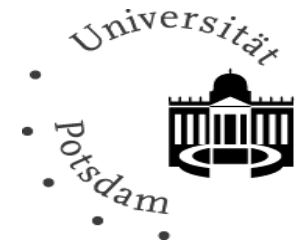
## II. Impact on capacity development

### Increase in CDM projects developed by CDM Centres



## II. Impact on market regulation

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**Hypothesis 3:** *The CDM Centre can have an indirect impact on overcoming a missing CDM institutional structure, so that CDM-related policies and market incentives are introduced.*

**Outputs:** Policy advice for the provincial government

**Outcomes:** Government officials ratify CDM-related regulations and market incentives, e.g. general political support statements, tax cuts, codes and standards.



## II. Impact on market regulation

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CDM Centers are actively advising the provincial government by personal contacts and official reports.

Legally binding CDM rules & regulations are only done by the central government.

„Soft“ measures are put into force by provincial governments: attendance of high level officials at CDM conferences, statements and notes of government officials supporting the CDM, and provincial-level CDM research projects.

## II. Impact on market commercialisation

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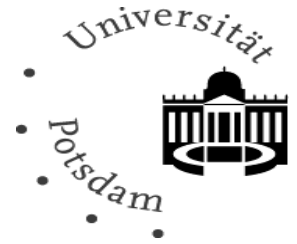
**Hypothesis 4:** *The CDM Centre can have an indirect impact on market commercialisation, so that the CDM becomes common practice in the province.*

**Outputs:** Development of PDDs, lobbying with project owners, government officials and financial institutions

**Outcomes:** Majority of project owners uses CDM financing if appropriate, increase of no. of PDDs and volume of CERs. No. of PDDs in province has increased and CDM projects show high quality (e.g. all PDDs developed become approved by EB). Additionality of projects becomes questionable. CDM has become part of long-term political policies/planning. CER revenues have become a common security for loans.

## II. Impact on market commercialisation

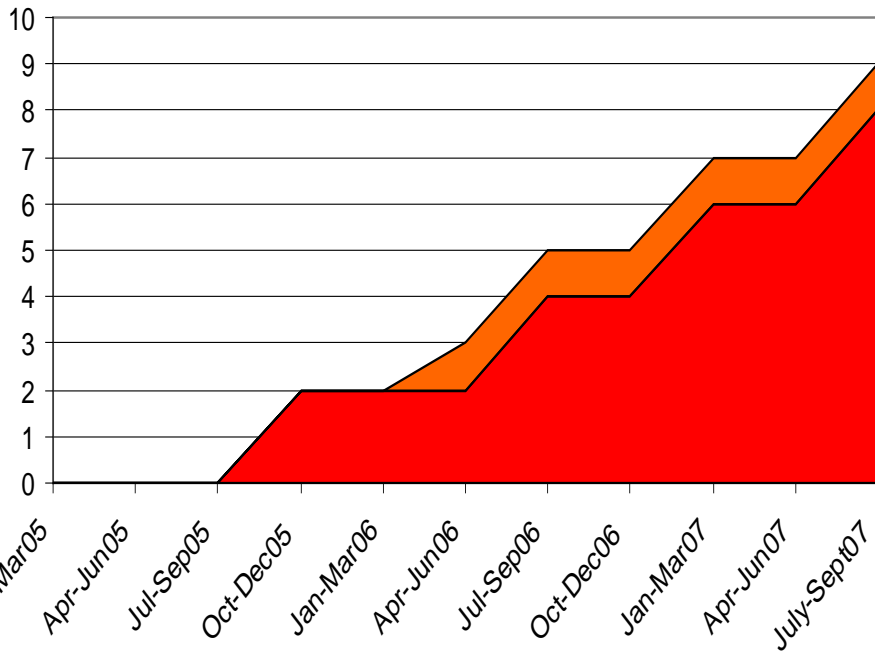
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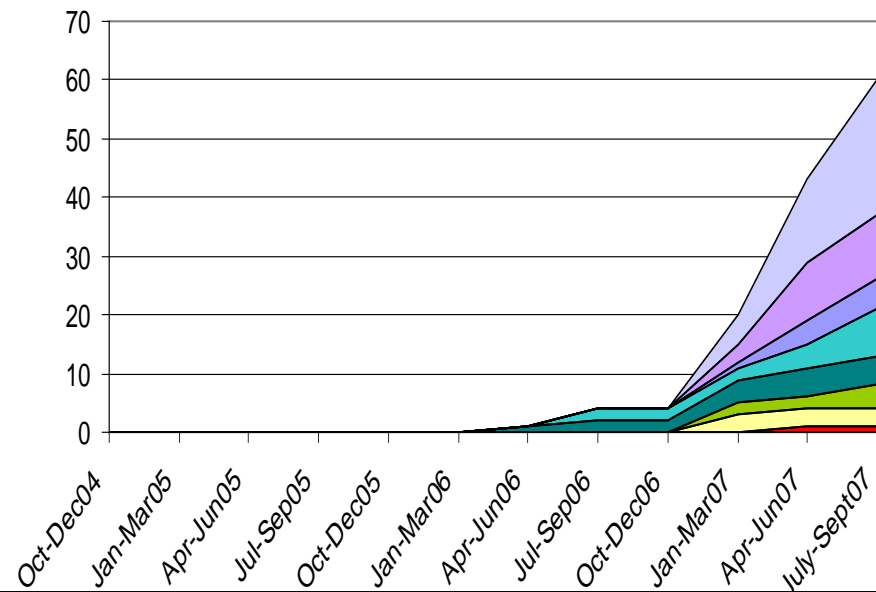
PDD development is the core activity of all CDM Centers. They differ in no. and in quality of developed PDDs. Correlation exists between early market entry and no. of projects developed.

CDM centres do hardly any lobbying with financial institutions, which tend not to take CDM into loan considerations.

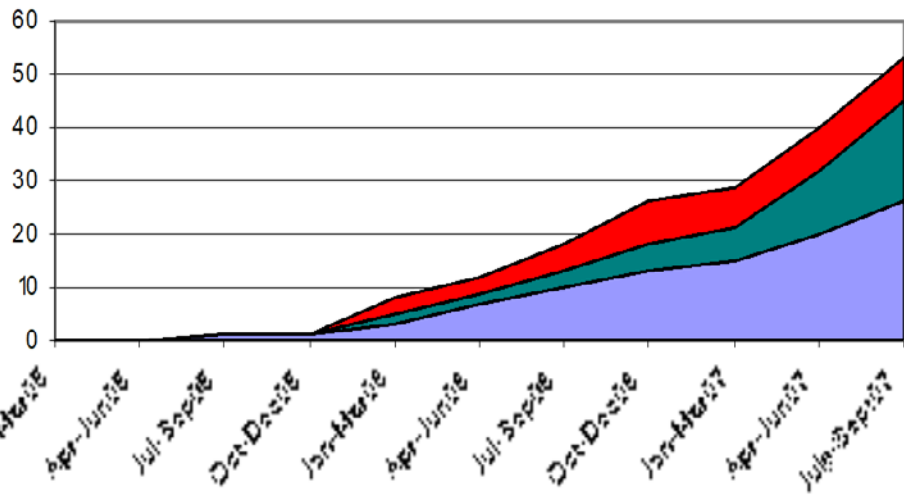
■ Ningxia CDM Center ■ Shanghai Chuanji Investment



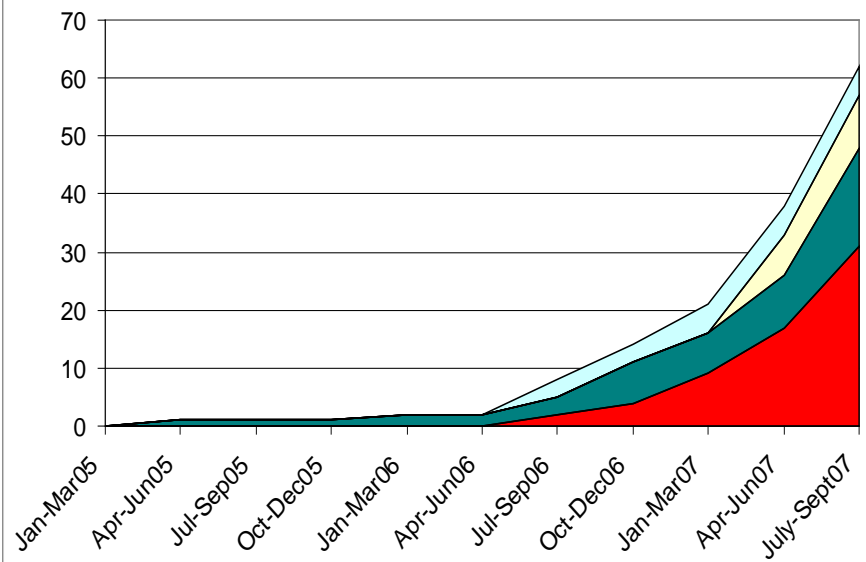
■ Yunnan CDM Center ■ Hunan University ■ Easy Carbon  
 ■ Millenium Captial Services ■ Others (5) ■ Ecosecurities  
 ■ Clean Energy Investment ■ Beijing Tianqing



■ Others (18) ■ Caspervandertak + Gansu Tonghe ■ Gansu CDM Center

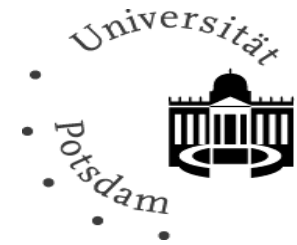


■ Hunan CDM Center ■ Others (14) ■ Accord ■ Tuttle Intern.



## II. Impact on market diversification

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**Hypothesis 5:** *The CDM Centre can have an indirect impact on market diversification of the CDM market, so that the market diversifies in terms of product (= type of CDM/VER project), producers (=project developers) and consumers (=buyers).*

**Outputs:** Provision of information and technical assistance is provided for applying new types of CDM projects. Research on new methodologies. Initiation of intra-provincial market cooperation.

**Outcomes:** New “CDM products” such as new methodologies or VERs, Gold Standard CDM, and MDG CDM projects types appear on the market. Diversification in no. and specialisation of CDM consultancies; diversification of seller and purchaser demographics.

## II. Impact on market diversification

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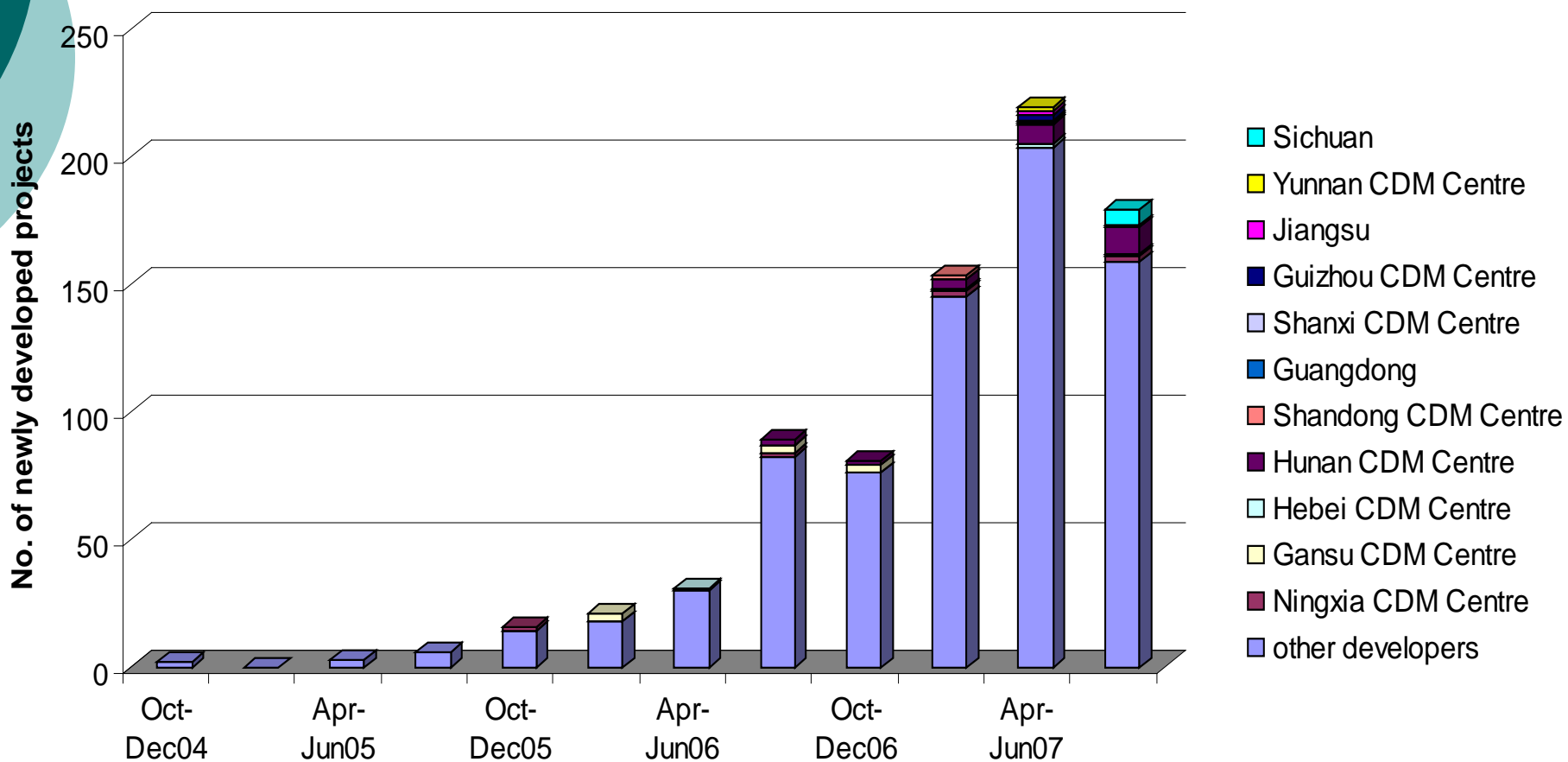


No methodology development by CDM Centers  
All CDM Centers have experiences exchanges,  
some have bilateral contracts to develop PDDs  
in cooperation.

VER-market is introduced in provincial trainings.  
Gold Standards projects are in the process of  
being developed by some CDM Centers.  
However, there is no systematic approach of  
diversifying the market, does not seem to be  
the mandate of the Centers.

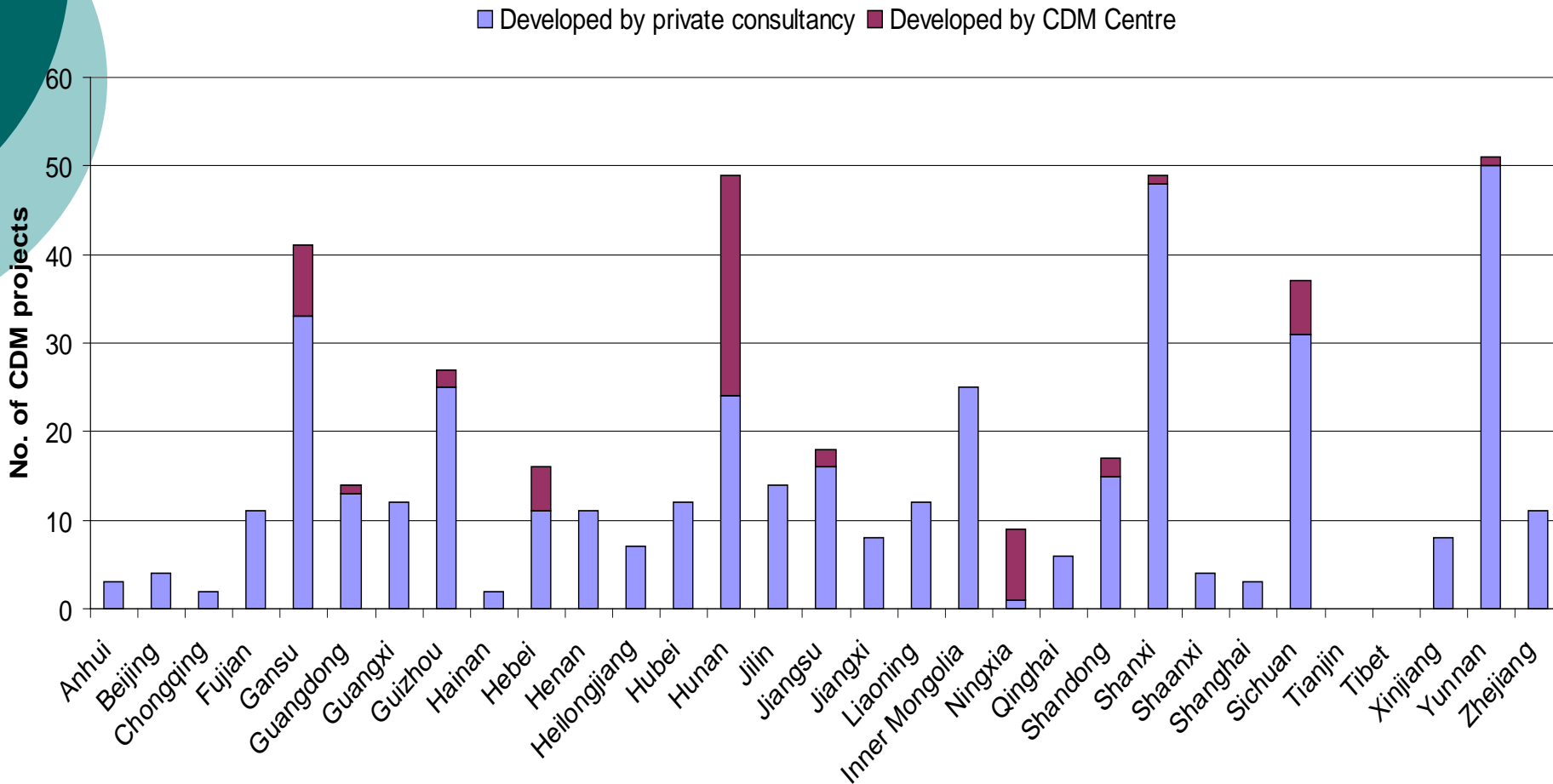
Existence of some inter-provincial cooperations,  
e.g. for joint CDM project development.

# Absolute impact of CDM Centres



Source: UNDP Risoe October 2007

# Relative impact of CDM Centres



Source: UNDP Risoe October 07



# Transferability

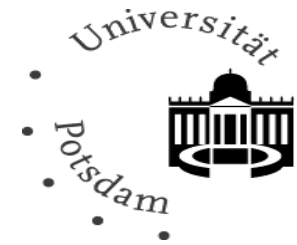
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Challenges for establishing CDM centres in other countries:

- Chinese feature of CDM Centres being “Shiye danwei” (事业单位) = privately run companies that serve the government for providing public services.
- Selection of „top down approach“ or „bottom up“ for setting up CDM Centres

# Methodological challenges for discussion

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## 1. Assessment of an ex-ante project situation

Method: ex post peer review

Problem: a) memories reliable?

b) High staff fluctuations

## 2. Measuring impacts of trainings on CDM project development capacity

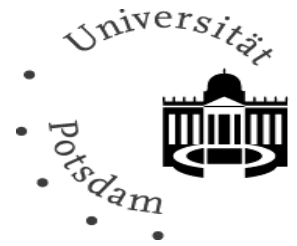
Method: Comparison of outputs by project developers and peer assessment.

Problem: causal connection remains anecdotal

## 3. Assessment of alternative explanations for market development, e.g. how to weigh the relevance of CDM trainings conducted by the CDM Centres versus trainings conducted by industry associations?

Thank you for  
your attention!

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