

Introduction to adaptation policy in Japan - A-PLAT and AP-PLAT - Yasuaki Hijioka

National Institute for Environmental Studies

Environmental Urban Systems Section/ Climate Change Strategy Collaboration Office,
Center for Social and Environmental Systems Research

23rd AIM International Workshop, 27-28 November, 2017

Ohyama Memorial Hall, NIES, Tsukuba, Japan



Asia-Pacific Integrated Model

<http://www-iam.nies.go.jp/aim/index.html>



Contents

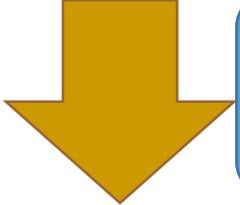
- 1. Climate change adaptation actions in Japan**
- 2. Promote national adaptation : A-PLAT**
(Climate Change **A**daptation **Plat**form)
- 3. Support adaptation activities in Asia Pacific region: AP-PLAT**
(**A**sia-**P**acific Adaptation Information **Plat**form)

Steps for National Adaptation Planning in Japan

Fourth Environment Basic Plan (Cabinet Decision, April 2012) decided to assess impacts of climate change and to promote adaptation measures



“Expert Committee on Climate Change Impact Assessment” was established under Central Environment Council (2 July, 2013)



- Projection of climate change and its impacts in Japan
- Reviews for more than 500 papers by 57 experts
- Assessment for 56 items in 7 thematic areas
- Expert judgement on significance, urgency and confidence levels

Report on Climate Change Impact Assessment in Japan (10 March, 2015)



Inter-Ministry Meeting for Climate Change Adaptation (11 September, 2015)



National Adaptation Plan was drafted by the Inter-Ministry Meeting, and called for **public comments** (23 October, 2015)



National Adaptation Plan was formulated (Cabinet decision, 27 November 2015)

Contents of Japan's NAP

I. Basic concept (Vision, Basic strategy, Period, Basic approach)

- Minimizing or avoiding climate change impacts on people's lives, property and livelihood, economy and ecology by implementing adaptation at any occasion

II. Sectoral measures

- Summarizing climate change impacts and basic adaptation measures by sector ("Agriculture, Forest/Forestry, Fisheries", "Water environment, Water resource", "Natural ecosystems", "Natural disasters, Coastal areas", "Human health", "Industrial/Economic activities", and "Life of Citizenry, Urban Life")

III. Basic measures and international measures

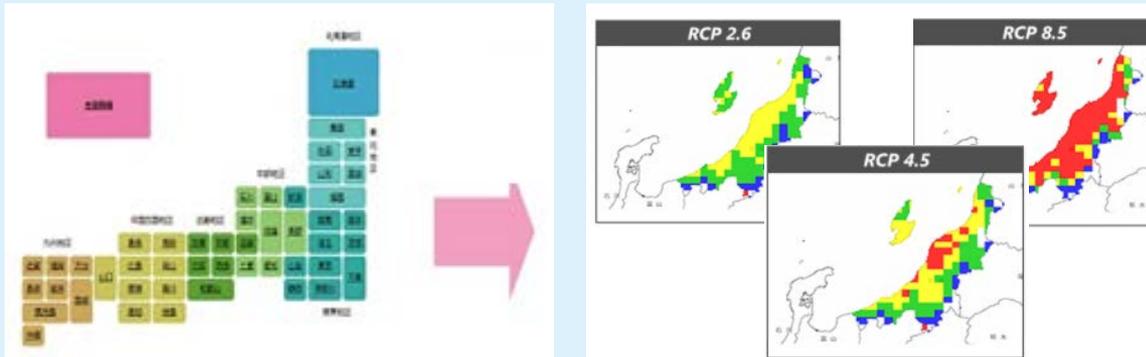
- (i) Observation and monitoring, Research and Studies
- (ii) Sharing and providing information related to climate risk
- (iii) Promotion of adaptation in region
- (iv) Promotion of international cooperation and contribution

} A-PLAT
→ AP-PLAT

Outline of A-PLAT

- Aims at being a basis **for adaptation actions of local governments, businesses, and citizens.**
- **Collects and provides climate risk information** and best practices; develops tools to promote adaptation actions.
- Operated by the National Institute for Environmental Studies (NIES) with cooperation of relevant ministries.

Provide climate risk information



Stakeholders:



Local Government



Private Sectors



Individuals &
Communities

A-PLAT

Consists of 6 key sections

Key pages are:

1. What's Climate Change Adaptation?
2. National Adaptation Plan
3. National & Local Info. (S-8)
4. For Local government
5. For Private sector
6. For Individuals



2. National Adaptation Plan

National Adaptation Plan of Japan National Plan for Adaptation to the Impacts of Climate Change

HOME > National Plan for Adaptation to the Impacts of Climate Change

National Plan for Adaptation to the Impacts of Climate Change



National Plan for Adaptation to the Impacts of Climate Change was formulated as the 1st adaptation plan to progress adaptation to climate change impacts systematically and comprehensively.

[National Plan for Adaptation to the Impacts of Climate Change \(PDF\)](#)

Link to National Adaptation Plan of Japan

- The IPCC's Fifth Assessment Report shows that global mean temperature will increase even if reduction of GHG is advanced.
- It is necessary to promote "adaptation" in order to address climate change impacts.
- "Report on Assessment of Impacts of Climate Change in Japan and Future Challenges (Comment Submission)" was formulated by the Central Environment Council on March 2015.
- Climate Change in Japan

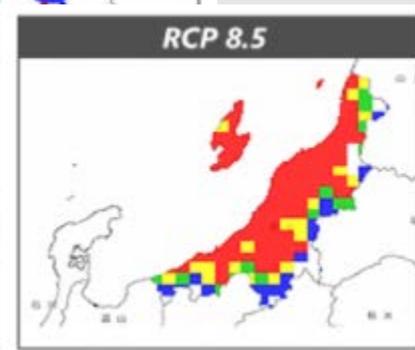
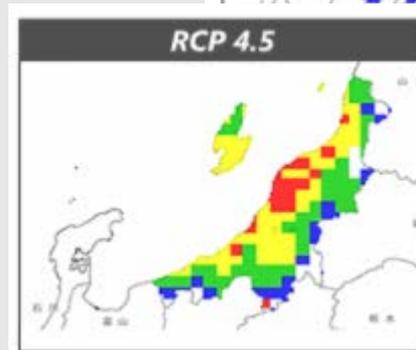


Outline of the “National Plan for Adaptation to the Impacts of Climate Change”

3. Risk information on WebGIS

Future climate projections and quantitative climate-change impact assessment by prefecture

Target area: Niigata pref.
 Index: Rice yield (quality oriented)
 Period: the end of 21th



4. Contents for stakeholders

Local Governments

List of adaptation plans by local gov.

東北地区	
青森県	
岩手県	・ 岩手県気候変動適応化対策部方針 (平成29年3月策定) NEW
秋田県	・ 第2次秋田県地球温暖化対策推進計画 (平成29年3月策定) NEW
山形県	・ 山形県地球温暖化対策実行計画(中期見直し版) (平成29年2月策定) NEW
宮城県	・ 仙台市地球温暖化対策推進計画2016-2020 (平成28年3月策定)
福島県	・ 福島県地球温暖化対策推進計画 (平成29年3月策定) NEW
関東地区	
茨城県	・ 茨城県地球温暖化対策実行計画 (平成29年3月策定) NEW
栃木県	・ 栃木県地球温暖化対策実行計画 (平成27年度策定)
群馬県	・ 群馬県地球温暖化対策実行計画(改定版) (平成26年度改訂)
埼玉県	・ ストップ温暖化・埼玉ナビゲーション2050(改訂版) (埼玉県地球温暖化対策実行計画「気候危機編」) (平成26年度改訂)
	・ 地球温暖化への適応に向けて～戦略の方向性～ (平成28年3月策定) NEW
千葉県	・ 千葉県地球温暖化対策実行計画～CO2削減スマートプラン～ (平成28年9月策定)
	・ 千葉市地球温暖化対策実行計画 (平成28年10月改定)
東京都	・ 東京都気候変動計画 (平成27年度策定)
	・ 神奈川(県)地球温暖化対策計画 (平成28年10月改定)

Municipal Adaptation Planning Guideline



Private Sector

- *Climate risk
- *Adaptation Business

Water environment and water resources

Yamaha Motor Co., Ltd.
Sustainable Water Supply

Water environment and water resources

2017.8

Addressing water pollution caused by floods

Profile of Project Company

Yamaha Motor was set up in 1955 as a motorcycle manufacturer. Since then the Company aims at contributing to people's lives worldwide through its products. The first trigger to bring in water purification business was complaints received from susceptible families working in a motorcycle factory in Indonesia in 1982. The complaints were on the murky color and taste smell of local tap water. In response, the Company developed a tap water purifier for household and started marketing and operation tentatively in Indonesia in 2010, which became the prototype of the System at present.

Product & Technology

"Yamaha Clean Water Supply System" purifies water through "Slow Sand Filter" using sand and gravel. Physical dirt and rubbish are removed from surface water pumped through the pipe through "Filtration Tanks" embedded with sand and gravel. Dissolved oxygen levels are increased by photosynthesis of algae which naturally occurs inside the "Bio-Pool". The System's requiring no electricity or medicines enables self-functional operation and maintenance by local community without the need for advanced technology and high costs for operation and maintenance.

Project Details

The System has been introduced to medical and educational facilities and rural areas in countries vulnerable to water pollution such as Indonesia, Vietnam, Senegal and Mauritania, drastically reducing the outbreak of diarrhea, fever and other diseases. The System has also transformed people's lives. Local residents are now relieved from the stress of pumping water from the well and they have profited themselves production and learning activities. Economic development in rural areas and villages has also been achieved through new businesses such as water delivery, fuel cleaning and ice making. Bying the System as a contributor to social infrastructure development while enhancing corporate awareness at the same time, Yamaha Motor is actively introducing the System to areas with water supply but without purification technology in cooperation with other donors.

Water Purification (Before & After)

Children pumping Clean Water (Senegal)



Individuals

私たちの生活にも気候変動による様々な影響がみられます。暑と比べて、皆さんの周りではどんな変化がありますか？

せわしなく梅雨がいつとと通り過ぎる...

熱中症に関するニュースをよく見聞きする...

デング熱など、蚊に関する病気が増えたと感じている...

豪雨や竜巻など、異常気象が増えたと感じている...

気候変動

熱中症

デング熱

豪雨・大雨

影響

おすすめ動画・WEBサイト

適応しよう！ 異常気象には防災対策

出典：内閣府大臣官邸政府広報室

適応しよう！ 洪水・土砂災害から身を守る～ハザードマップの利用

出典：国土交通省

適応しよう！ 豪雨・大雨、電害から身を守る～自治体のサービス

出典：気象庁

適応しよう！ 緊急時に備えて買いおきをしましょう

出典：農林水産省

Business workshop (1. Nov 2017)

156 participants

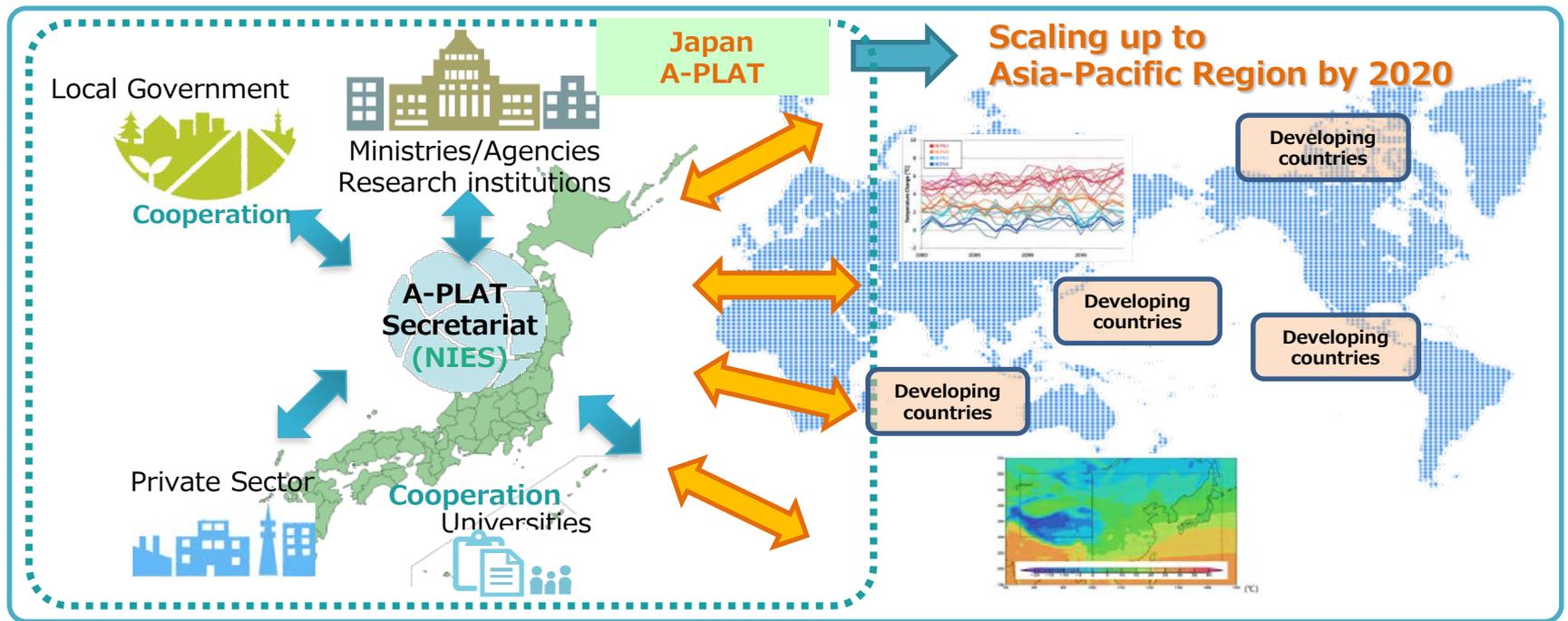
講演資料 (PDF: 1.8MB)



Asia-Pacific Adaptation Information Platform (AP-PLAT)



- **Asia Pacific Adaptation Information Platform** will be established by 2020 to share **climate risk information** via online with research institutes/universities in both developing/developed countries.
- To support adaptation measures by providing advanced scientific climate risk information
- Japan will take a lead in the following activities under the Platform
 - ① **Develop dataset** on **projection of climate change impacts** in the region through bilateral & intensive studies
 - ② **Develop supporting toolkits** for officials and stakeholders engaged in adaptation planning
 - ③ **Build capacity** on climate change **impact assessment/ adaptation planning**
- **Calling for participation** from the countries in Asia Pacific and other Regions





AP-PLAT Conceptual Framework

- Provide expertise and advice to countries, communities and companies on designing, financing, implementing and monitoring adaptation action



GCEA (Global Centre of Excellence on Climate Adaptation)



GLOBAL ADAPTATION NETWORK



AP PLAT



- **Develop** and run **dataset** on projection of climate change impacts
- **Develop** supporting **toolkits** (Downscaling, adaptation planning, impact assessment format, guideline, etc)
- **Enhance capacity** on climate change impact assessment/adaptation planning (multilateral, bilateral), GCF proposal

Adaptation knowledge exchange

- Sustained Learning Exchange
- City-to-City exchange
- International Forum



"Regional Climate Projections Consortium and Data Facility in Asia and the Pacific"



Bilateral Cooperation

- CC Impact Assessment
- CC Adaptation Planning
- CC Capacity Building (technical, multilateral etc)

CLICC Country Level Impacts of Climate Change

Develop methodology to assist countries to present climate change impact assessment in a consistent manner.

A-PLAT and AP-PLAT

- **A-PLAT** (Climate Change **A**daptation **Plat**form) is a "**One-stop**" online resource for adaptation to climate-change impacts in Japan.
- **A-PLAT** will expand the function into **AP-PLAT** (**A**sia **P**acific Adaptation Information **Plat**form) to promote adaptation in the region.



ご清聴ありがとうございました
Thank you for your attention



Asia-Pacific Integrated Model
<http://www-iam.nies.go.jp/aim/index.html>

