

# Progress report of AIM/Impact [Country]

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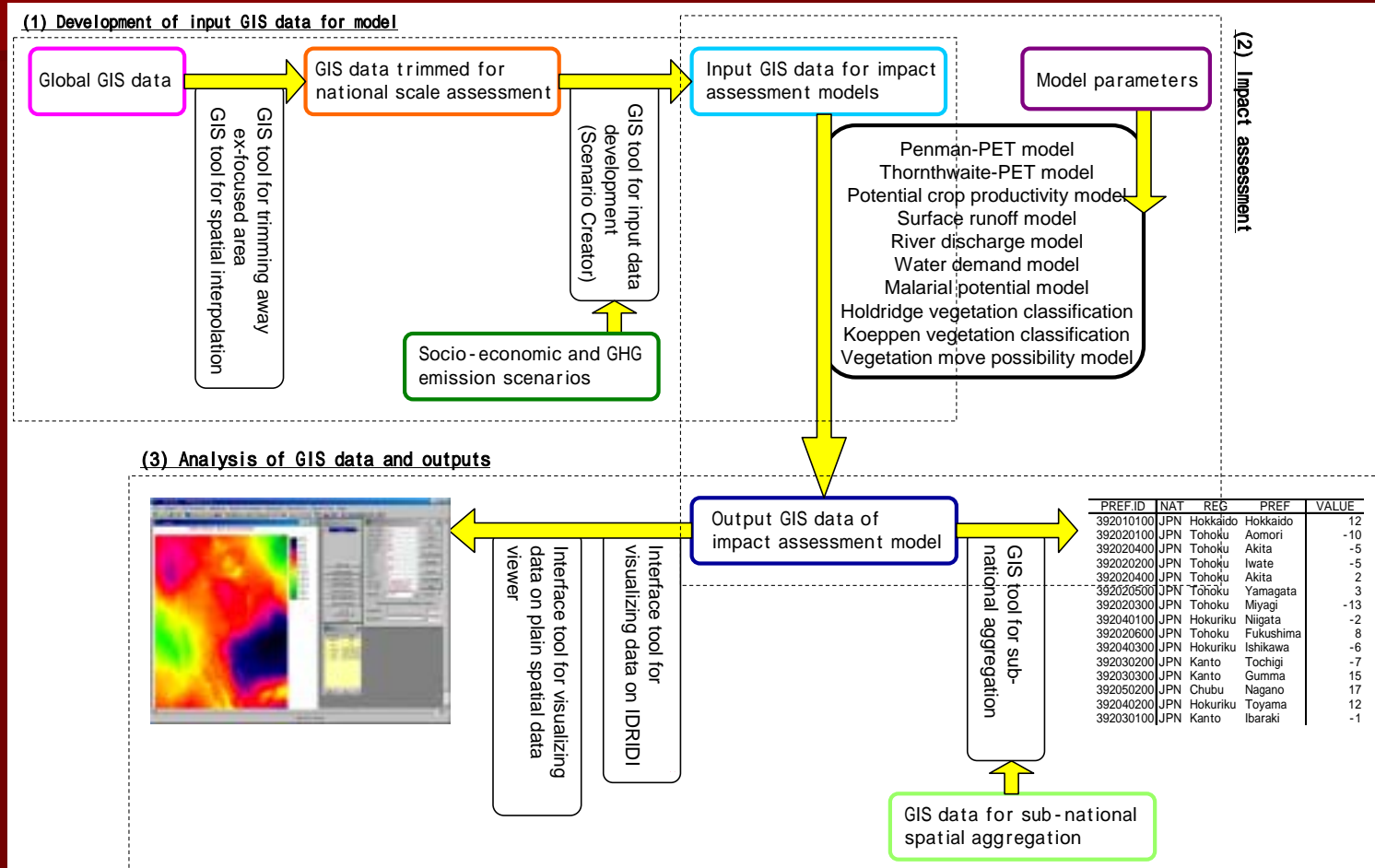
# Items of today's presentation

- Framework of AIM/Impact [Country]
- Modules and data which have been developed
- Demonstration
- Development plan in FY2003

# Objective of AIM/Impact [Country]

- Package of models, tools and data for scenario analysis of national-scale climate change impact assessment
- Executable on PC-Windows
- Bundled datasets for basic assessment
- Readily achievement of spatial analysis
- Detailed manual documents

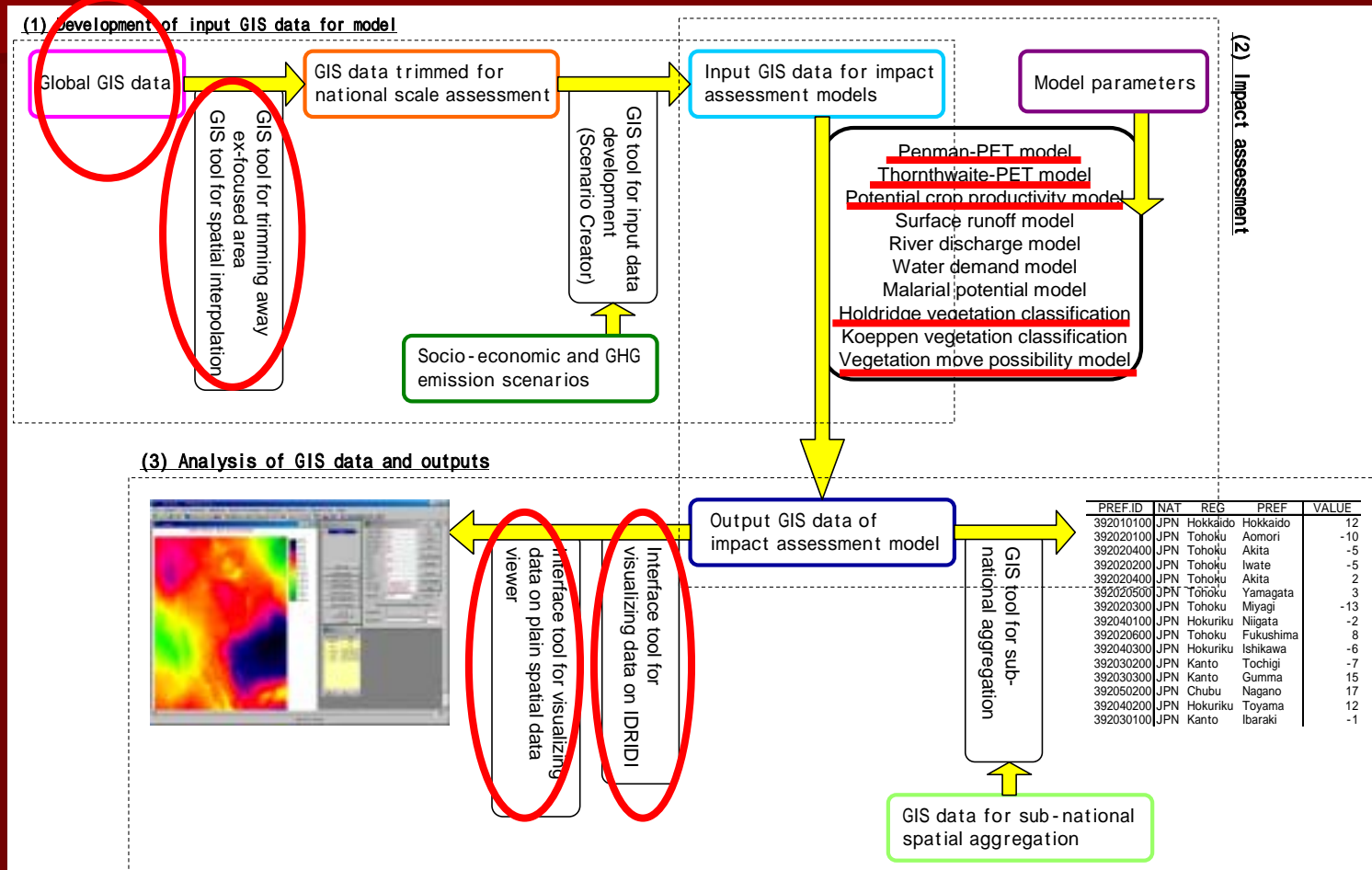
# Framework of AIM/Impact [Country]



# What has been done!

- Basic sub-routines
- Import commands
- Interpolation
- Potential evapotranspiration
- Vegetation classification/shift
- Crop productivity
- Simple tool for visualizing spatial data
- Graphical User Interfaces

# Framework of AIM/Impact [Country]



# Demonstration

- Estimation of crop potential productivity in Korea with the graphical user interface

# Choose scenario and region

The screenshot shows the 'Scenario' tab of the Imapct\_Tool\_Ver0 application. The interface includes a menu bar with 'Scenario', 'Area', 'Execute', and 'Results'. A '1.Get Model' button is at the top. Below it, there are several input fields and update buttons: 'Model' (CCSRNIES), 'Scenario' (A2), 'Year' (2050), 'Crop' (Rice), and 'Select Pet' (Thornthwaite selected). Each input field has a corresponding 'Update' button.

Imapct\_Tool\_Ver0

Scenario Area Execute Results

1.Get Model

Model CCSRNIES 2.Update

Scenario A2 3.Update

Year 2050 (1990 - 2100)

Crop Rice

Select Pet  Thornthwaite  Penman 4.Update

Close

The screenshot shows the 'Area' tab of the Imapct\_Tool\_Ver0 application. The interface includes a menu bar with 'Scenario', 'Area', 'Execute', and 'Results'. There are checkboxes for 'World', 'Country', and 'Location'. The 'Country' checkbox is checked and set to 'Korea'. Below these are input fields for 'Latitude (MIN)', 'Latitude (MAX)', 'Longitude (MIN)', and 'Longitude (MAX)'. A '5.Update' button is at the bottom right.

Imapct\_Tool\_Ver0

Scenario Area Execute Results

World

Country : Korea

Location :

Latitude (MIN) 30 Latitude (MAX) 50

Longitude (MIN) 115 Longitude (MAX) 140

5.Update

Close



# Execute simulation and display results

The screenshot shows the 'Execute' tab of the Imapct\_Tool\_Ver0 application. The interface includes a menu bar with 'Scenario', 'Area', 'Execute', and 'Results'. The main area contains the following configuration details:

- Model: **CCSRNIES**      Scenario: **A2**
- Year: **2050**      Crop: **Rice**
- Area: **Korea**
- Location: ( 50 . 115 )      ( 50 . 140 )  
( 30 . 115 )      ( 30 . 140 )

Below these details are four checkboxes:

- Soil constraint
- Pet calculation      **Thornthwaite**
- Potential productivity
- Potential crop productivity considering soil constraints

At the bottom right, there is a button labeled '6.Execute' and a 'Close' button at the very bottom.

The screenshot shows the 'Results' tab of the Imapct\_Tool\_Ver0 application. The interface includes a menu bar with 'Scenario', 'Area', 'Execute', and 'Results'. The main area displays simulation results for two categories:

**1.Pet (thornthwaite)**

- InputFile: **CCNI\_A2\_TEMP2050**
- OutputDir: **C:\%takahasa%country%\Korea%\AGR**
- OutputFile: **CCNI\_A2\_PETT2050**
- Month: **04** (dropdown menu)

Buttons for 'See IDRISI' and 'See' are located to the right of the month dropdown.

**2.Potential Productivity**

- OutputDir: **C:\%takahasa%country%\Korea%\AGR**
- Growing Period: **CCNI\_A2\_GRPD2050Rice**
- Potential Productivity: **CCNI\_A2\_PPRD2050Rice**

Buttons for 'See IDRISI' and 'See' are located below the radio buttons.

At the bottom right, there is a 'Close' button.



# WEB of AIM/Impact [Country]

- <http://www-iam.nies.go.jp/impact/country>
- Release: The end of March

# What will be distributed on the WEB very soon? (1)

- Tool commands
  - Data conversion/import command
  - Interpolation command
  - Region trim command
  - Spatial data viewer
- Model commands
  - Crop productivity model
  - Vegetation classification/shift model
  - Penman/Thornthwaite PET model

# What will be distributed on the WEB very soon? (2)

- User interface
  - GUI for climate scenario preparation
  - GUI for crop productivity simulation
  - GUI for vegetation classification/shift simulation
- Data
  - Observed climate (Baseline)
    - LINK-CRU dataset distributed at IPCC-DDC
  - GCM projection
    - IS92a simulations
    - SRES simulations
  - Soil (for crop productivity model)
    - FAO/UNESCO Soil map of the world

# What will be distributed on the WEB in the next three months?

- Additional model commands
  - Runoff model
  - Water demand model
- Additional tool commands
  - Climate scenario creator (for pattern scaling)
  - Sub-national aggregator
- Manual documents
- Additional climate data
  - GCM results

# Development schedule

- Ver 0.1 : March 2003
  - Release of Web site
  - Distribution of the completed commands
- Ver 0.5 : May 2003
  - Completion of the remained tasks
- Ver 1.0 : July 2003
  - Bug fix etc.
  - Distribution of CD-ROM

Thank you and see you on the Web!