

Table of contents

PAGE

Summary of ICCAP - Framework, Outcomes and Implication of the Project -

Tsugihiko WATANABE (RIHN)

Generated Social Scenarios and Basin Conditions for the Final Integration

Takanori NAGANO, Yoichi FUJIHARA (RIHN), Kenji TANAKA (DPRI, Kyoto University), Chieko UMETSU, Keisuke HOSHIKAWA, Takashi KUME(RIHN), Fujio KIMURA(Tsukuba University) and Tsugihiko WATANABE(RIHN)

【Climate】

Downscaling of the global warming projections to Turkey

Fujio KIMURA (University of Tsukuba), Akio KITOH (Meteorological Research Institute), Akimasa SUMI (University of Tokyo), Jun ASANUMA (University of Tsukuba) and Akiyo YATAGAI (RIHN)

Development of a daily grid precipitation data in the East Mediterranean and its application for the

ICCAP studies

Akiyo YATAGAI(RIHN)

Future Climate Projections around Turkey by Global Climate Models

Akio KITOH (Meteorological Research Institute)

Downscaling by Pseudo Global Warning Method

Fujio KIMURA (University of Tsukuba) and Akio KITOH (Meteorological Research Institute)

Effect of Irrigated Agriculture on Low-level Cloud in the Chukurova Plain, Turkey

Toshichika IIZUMI, Toshihisa FUJIWARA (University of Tsukuba), Takehiro YUYAMA (University of Tsukuba) and Fujio KIMURA (University of Tsukuba)

【Hydrology and Water Resource】

Final Report of the ICCAP Hydrology and Water Resources

Katsuyuki FUJINAWA (Shinshu University), Kenji TANAKA (Kyoto University), Yoichi FUJIHARA (RIHN) and Toshiharu KOJIRI (Kyoto University)

Assessment of climate change impacts on water resources of seyhan river basin

Levent TEZCAN, Mehmet EKMEKÇI, Özlem ATILLA, Dilek GÜRKAN, Orçun YALÇINKAYA, Otgonbayar NAMKHAI, M. EVREN SOYLU (Hacettepe University), Sevgi DONMA, Dilek YILMAZER, Adil AKYATAN, Nurettin PELEN (6th Regional Directorate of State Hydraulic Works), Fatih TOPALOĞLU (University of Çukurova) and Ahmet İRVEM (Mustafa Kemal University)

Impacts of Climate Change on Subsurface Water Environment in the Lower Seyhan River Basin

—Final Results of Calibration and Projection—

Katsuyuki FUJINAWA, Takahiro IBA (Shinshu University) and Yoichi FUJIHARA (RIHN)

Projection of the Impact of Climate Change on the Surface Energy and Water Balance in the Seyhan River Basin Turkey

Kenji TANAKA (Kyoto University), Yoichi FUJIHARA (RIHN) and Toshiharu KOJIRI (Kyoto University)

Assessing the Impact of Climate Change on the Water Resources of the Seyhan River Basin, Turkey

Yoichi FUJIHARA (RIHN), Kenji TANAKA (Kyoto University), Tsugihiko WATANABE (RIHN) and Toshiharu KOJIRI (Kyoto University)

An Inverse Modeling Approach to Assess the Impacts of Climate Change on Water Resources Management at the Watershed Scale

Yoichi FUJIHARA (RIHN), Slobodan P. SIMONOVIC (University of Western Ontario), Fatih TOPALOGLU (Çukurova University), Tsugihiko WATANABE (RIHN) and Kenji TANAKA (Kyoto University)

【Vegetation】

Effect of climate changes on the species composition and productivity of plant communities in the eastern Mediterranean region of Turkey

Shigenobu TAMAI, Keisuke KATO (Tottori University), Yuki Kishibe (Tottori University), Makoto ANDO (Kyoto University) and Junji SANO (Tottori University)

Possible scenario for the vegetation change in seyhan river basin and role of land uses “anthropozoic pressures”

Atik, M. (University of Akdeniz), Tamai, S. (Tottori University Arid Land Research Center), Altan, T. (University of Çukurova), Ando, M. (Kyoto University Field Research Center), Sano, J. (Tottori University Agriculture Fac. Forest Ecology and Ecosystem Management Lab.), Atmaca, M. (University of Mustafa Kemal), Aktoklu, E. (University of Mustafa Kemal), Kaplan, K. (University of Mustafa Kemal), Artar, M. (University of Karaelmas Bartın Forestry), Güzelmansur, A. (University of Mustafa Kemal), Çiçinoğlu, A. (University of Çukurova) and Büyükaşık, Y. (University of Mustafa Kemal)

Field Research of Dominant Vegetation and Environmental factors on the Basis of Projection on the Vegetation Change after Global Warming in the Eastern Mediterranean Region of Turkey

Junji SANO (Forest Ecology and Ecosystem Management Laboratory, Field Science Center, Faculty of Agriculture, Tottori University), Makoto ANDO (Kyoto University Field Research Center) and Shigenobu TAMAI (Tottori University)

The Vertical Distribution of the Vegetation on Cukurova Plain in the Eastern Mediterranean Region of Turkey

Makoto ANDO (Kyoto University), Junji SANO (Tottori University) and Shigenobu TAMAI (Tottori University)

Past, present and future perspectives of indigenous livestock production systems in the seyhan basin, southern turkey

Okan Güney (University of Çukurova), Aykut Gül (University of Çukurova), Nazan Darcan (University of

Çukurova), Nafiz Çeliktaş (University of Mustafa Kemal), İnanç Güney (University of Çukurova), Hilal Işık (University of Çukurova) and Masahiro HIRAT (Obihiro University of Agriculture and Veterinary Medicine)

【Crop Productivity】

Estimation of Crop Production by the Future Climate Changes in Surrounding Areas of the Seyhan River in Turkey

Tohru KOBATA (Shimane University)

The effect of desiccated soils on transpiration in spring wheat subject to elevated temperature and CO₂ concentration

Tohru KOBATA (Shimane University)

Predicting the Impact of Global Warming on Wheat Production in Adana

Hiroshi NAKAGAWA (Ishikawa Prefectural University), Tohru KOBATA (Shimane University), Tomihisa YANO (Kyushu Kyouritsu University), Ceraledin BARUTÇULAR (Çukurova University), Müjde KOÇKenji TANAKA (Kyoto University), Takanori NAGANO, Yoichi FUJIWARA, Keisuke HOSHIKAWA, Takashi KUME and Tsugihiko WATANABE (RINH)

Actual Evapotranspiration and Potential Evapotranspiration of Maize Crop in Adana Region, Turkey

Hiromichi ODANI (University of Shiga Prefecture), Shinichi TAKEUCHI (Kyushu Kyouritsu University), Mustafa UNLU (Çukurova University), Kanako SASAKI (University of Shiga Prefecture) and Tomohisa YANO (Kyushu Kyouritsu University)

Separate estimation of transpiration and evaporation from a maize field

Shinichi TAKEUCHI (Kyushu Kyouritsu University), Hiromichi ODANI (University of Shiga Prefecture), Mustafa UNLU (Çukurova University) and Tomohisa YANO (Kyushu Kyouritsu University and Tottori University Arid Land Research Center, Emeritus)

Simulation of Crop Productivity for Evaluating Climate Change Effects

Tomohisa YANO (Kyushu Kyouritsu University), Masumi KORIYAMA, Tomokazu HARAGUCHI (Saga University) and Mehmet AYDIN (Mustafa Kemal University)

Prediction of Future Change of Water Demand Following Global Warming in the Cukurova Region, Turkey

Tomohisa YANO (Kyouritsu University), Tomokazu HARAGUCHI, Masumi KORIYAMA (Saga University) and Mehmet AYDIN (Mustafa Kemal University)

Combined Effects of Elevated Temperature and Carbon Dioxide Concentration on Growth and Water Use of Maize

Tomokazu HARAGUCHI (Saga University), Yoshisuke NAKANO (Kyusu University), Tomohisa YANO (Kyushu Kyouritsu University) and Masumi KORIYAMA (Saga University)

【Irrigation and Drainage】

The Integrated Assessment of the Impact of Climate Change on Lower Seyhan Irrigation Project

Takanori NAGANO (RIHN), Sevgi DONMA (6th regional directorate of State Hydraulic Works), Keisuke

HOSHIKAWA, Takashi KUME, Chieko UMETSU (RIHN), Erhan AKÇA (Çukurova University), Sermet ÖNDER (Mustafa Kemal University), Suha BERBEROĞLU (Çukurova University), Bülent OZEKICI (Çukurova University), Tsugihiko WATANABE (RIHN) , Selim KAPUR (Çukurova University) and Rıza KANBER (Çukurova University)

Impact of the Irrigation Water Use on the Groundwater Environment and the Soil Salinity

Takashi KUME, Takanori NAGANO (RIHN), Erhan AKÇA (Çukurova University), Sevgi DONMA (6th Regional Directorate of State Hydraulic Works), Keisuke HOSHIKAWA (RIHN), Suha BERBEROĞLU, Musa SERDEM, Selim KAPUR (Çukurova University), and Tsugihiko WATANABE (RIHN)

Long-term Changes of Level and Salinity of Shallow Water Table in the Lower Seyhan Plain, Turkey

Takanori NAGANO (RIHN), Sevgi DONMA (6th regional directorate of State Hydraulic Works), Takashi KUME (RIHN), Suha BERBEROĞLU (Çukurova University), Keisuke HOSHIKAWA (RIHN), Erhan AKÇA (Çukurova University), Selim KAPUR (Çukurova University) and Tsugihiko WATANABE (RIHN)

Evaluation of Impact of Climate Changes on the Lower Seyhan Irrigation Project, Turkey

Keisuke HOSHIKAWA, Takanori NAGANO, Takashi KUME (RIHN), Sevgi DONMA (6th Regional Directorate of State Hydraulic Works) and Tsugihiko WATANABE (RIHN)

Climate Change and Alternative Cropping Patterns in Lower Seyhan Irrigation Project: A Regional Simulation Analysis with MRI-GCM and CSSR-GCM(Tottori University)

Chieko Umetsu (RIHN), K. PALANISAMI (Tamilnadu Agricultural University), Ziya COŞKUN, Sevgi DONMA (6th Regional Directorate of State Hydraulic Works), Takanori NAGANO, Yoichi FUJIHARA (RIHN), Kenji TANAKA (Kyoto University)

【Socio-Economics】

The Final Report of the Socio-economic Sub-group of the ICCAP Project

Hiroshi TSUJII (Ishikawa Prefectural University) and Onur ERKAN (Çukurova University)

The Features of Agriculture in Adana Prefecture -From the Result of Farm Survey-

Motoi KUSADOKORO and Takeshi MARU (Kyoto University)

An Econometric and Agro-climatological Study of the Impact of Global Warming and Prices to Production of Rain-fed Wheat and Barley in Konya and Adana.

Hiroshi TSUJII (Ishikawa Prefectural University) and Ufuk GULTEKIN (Çukurova University)

The Change of the Weather Risk by Global Warming and the Impact on the Yield of Wheat in Adana, Turkey

Motoi KUSADOKORO (Kyoto University)

The Effect of Irrigation on the Adoption of Crop-Livestock Multiple-Farming and the Livestock Keeping

Takeshi MARU (Kyoto University)

Impacts of Climate Change and the EU Accession on Turkish Rural Industries by the Input-Output model and Markov-Transition Matrix

Masaru KAGATSUME (Kyoto University)

The Conservation of Government Pasture Land and the Role of Pasture Law in Turkey

Atsuyuki ASAMI (Kyoto University)

【ISRAEL】

Effect of Global Warming on the Secondary Factors Affecting Water Use Efficiency and Irrigation Management

Jiftah BEN-ASHER (Jacob Blaustein Institute for Desert Research and the Ben Gurion University of the Negev), Pinhas ALPERT (Tel Aviv University) and Mordechai (Moti) SHECHTER (University of Haifa)

I. Effect of Global Warming on the Secondary Factors Affecting Water Use Efficiency and Irrigation Management

J.BEN-ASHER, A GENIS (The Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev), F. EVRENDILEK (Mustafa Kemal University), M. AYDIN (Mustafa Kemal University), R.KANBER (Çukurova University) and K DOGAN (Çukurova University)

II. Effects of changing water availability on agricultural profits: The Israeli test case

Mordechai SHECHTER, David HAIM, Iddo KAN and Naomi ZEITOUNI (University of Haifa)

III. Climate analysis: regional atmospheric processes

P. ALPERT, C. PRICE and S. KRICHAK (Tel Aviv University)

【Keynote Lecture of the Symposium February 2007】

Climate Change and IPCC Assessments (Abstract)

Mostafa JAFARI (Islamic Republic of Iran Meteorological Organization)

【Appendix】

Appendix I Members List of ICCAP (2006-2007)

Appendix II Publications List of ICCAP

Appendix III List of ICCAP Publications: Reports and Proceedings