

מדינת ישראל משרד החקלאות ופיתוח הכפר **לשכת המדען הראשי** 

2017, פברואר, 2017

קול קורא לביצוע מחקרים משותפים ליפן וישראל בתחום החקלאות לשנת 2017

:רקע

על פי סעיף 8 בהחלטת ממשלה מס' 2395 מיום ה 04.01.2015 שמטרתה לקדם מאמץ ממשלתי ממוקד לחיזוק הקשרים הכלכליים עם יפן על מנת לאפשר את מיצוי הפוטנציאל הכלכלי הגלום עבור המשק הישראלי, משרד החקלאות ופיתוח הכפר החל בגיבוש שיתופי פעולה אפשריים לשם יישום ההחלטה האמורה. בהמשך למאמצים אילו המדען הראשי של משרד החקלאות ופיתוח הכפר מודיע על פרסום קול קורא למחקרים משותפים עם:

The Agriculture, Forestry and Fisheries Research Council Secretariat of Ministry of Agriculture Forestry and Fisheries of Japan (MAFF/AFFRCS)

לביצוע מחקרים בתחומי המחקר הבאים:

- 1. Using water of different quality and utilization system for irrigation (secondary and tertiary effluents, diluted wastewater, and desalinated water).
- 2. Improving water use efficiency in irrigated agriculture.
- 3. Interaction of irrigation practices with yield quantity.
- 4. Impact of irrigation and water quality on the environment (contamination of water resources, biogeochemistry, microbial ecosystem services and contamination, greenhouse gas emission).

במסגרת הקול הקורא מוזמנים החוקרים להגיש הצעות משותפות יחד עם חוקרים מיפן בתחומים הרלוונטיים. המחקרים ימומנו לתקופה של עד שלוש שנים.

התקציב הכולל שיוענק לכלל המחקרים שיאושרו בקול קורא זה בשנת 2017 הינו 3,000,000 שקל לכל תקופת המחקרים. במסגרת זו ימומנו עד 4 מחקרים בתחומים המופיעים מעלה, (אין חובה שכול תת התחומים ימומנו בהם מחקרים), כך שסך התקציב לכול תכנית יהיה 750,000 שקל לתוכנית, לכול שלוש שנות המחקר לצד הישראלי בלבד. כול צד יממן את המחקרים שלו עצמו.

Fax: 972-3-9697193: פקס e-mail: avip@moag.gov.il Tel : 972-3-9485553-4 טל: כתובתנו:לשכת המדען הראשי, משרד החקלאות, ת.ד 30, בית-דגן50250 Address: Ministry of Agriculture, Chief Scientist Office, P.O.B 30 Bet-Dagan 50250, ISRAEL

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לאחר אישורה של תכנית המחקר, (אשר אופן קבלת האישור מפורט במסמך הנוסף בשפה האנגלית שמצורף), מענק המחקר יהיה שקלי ולא צמוד למדד. הצעות המחקר המקיפות תוגשנה בשפה האנגלית על פי נוהל הגשת הצעות מחקר מקיפות כמפורט בקול קורא זה ובנוהלי הגשת הצעות מקיפות לקרן המדען הראשית של משרד החקלאות ופיתוח הכפר לשנת 2018. הקריטריונים והמשקולות לשיפוט ההצעות בהתאם לנספח המצורף כאן. נוהלי הגשת דוחות מדעיים וכספיים יהיו בהתאם לנהלים המופיעים בקול הקרן המרכזית לשנת 2018 כמופיע באתר המדען.

נושאי מחקר דומים או זהים שכבר ממומנים על ידי גורמים אחרים לרבות משרדי ממשלה אחרים כגון משרד המדע או יזמים פרטיים לא יאושרו למימון בקול קורא זה.

ההגשה תתבצע דרך אתר ה"מדענית" לוועדת שיפוט "ישראל-יפן".

www.agriscience.co.il

4. לוחות זמנים:

מועד אחרון לשאלות הבהרה (לרבות התייחסות לנספחי המכרז) 16/02/2017 עד השעה 15:00 מועד אחרון למתן תשובות הבהרה: 02/03/2017 עד שעה 15:00

מועד אחרון להגשה אלקטרונית של הבקשה למענק מחקר על ידי החוקרים לרשות המחקר: 23/03/2017 עד השעה 15:00

מועד אחרון להגשה אלקטרונית של הבקשה למענק מחקר על ידי רשויות המחקר לאתר המדען הראשי: 30/03/2017 עד השעה 15:00

מועד אחרון להגשת עותק קשיח למשרדי לשכת המדען הראשי, של הבקשה למענק מחקר הכוללים חתימות וחותמות: 06/04/2017 עד השעה 15:00

מועד אחרון להודעה על אישור ואו דחייה של הצעות: 28/05/2017

Ud: 972-3-9485553-4



Fax: 972-3-9697193: פקס e-mail: avip@moag.gov.il



מדינת ישראל משרד החקלאות ופיתוח הכפר **לשכת המדען הראשי** 

The Japan – Israel Cooperation in Agricultural Research Program 2017

## Call for Proposals

This Call for Proposals is issued by a framework program of cooperation established between the Agriculture, Forestry and Fisheries Research Council Secretariat of Ministry of Agriculture Forestry and Fisheries of Japan (MAFF/AFFRCS) and the Ministry of Agriculture and Rural Development, the State of Israel (MOARD).

The purpose is to provide a framework to foster collaborative, mission-oriented research between agricultural scientists from Japan and Israel, based on scientists carrying out joint agricultural research in predetermined areas of high priority to both countries.

The Japan-Israel program in 2017 will fund agricultural relevant research proposals with a focus on leading edge science in the following areas:

# Crop irrigation technologies and practices with water of different qualities and its environmental effects

#### **Background:**

The world population is increasing continuously and is expected to exceed nine billion in 2050. One of the main issues we have to tackle to satisfy the growing world food demand is deterioration of water resources for irrigation due to climate change, unsustainable management and inefficient irrigation. Israel and Japan both recognize the need to develop efficient, safe and sustainable irrigation technologies and practices with water of different types. This call will address this need with particular attention to the different foci of the two countries, in a collaborative framework that will allow maximum synergy between the binational research groups.

#### **Specific research themes:**

- 1. Using water of different quality and utilization system for irrigation (secondary and tertiary effluents, diluted wastewater, and desalinated water).
- 2. Improving water use efficiency in irrigated agriculture.
- 3. Interaction of irrigation practices with yield quantity.
- 4. Impact of irrigation and water quality on the environment (contamination of water resources, biogeochemistry, microbial ecosystem services and contamination, greenhouse gas emission).



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### **Guidelines for the preparation and submission of proposals**

### **Eligibility**

Eligible to apply for proposals are:

- from Japan, scientists affiliated with public or private research institutions(see MAFF/AFFRCS call for proposals).
- from Israel, scientists affiliated with all public or private non-profit research institutions (see MOARD Chief Scientist Call for Proposals 2017).

#### **Contacts:**

#### Japan:

Shuhei TORIUMI,

International Research Office, Agriculture, Forestry and Fisheries Research Council Secretariat, Ministry of Agriculture, Forestry and Fisheries

1-2-1, Kasumigaseki, Chiyoda-ku, Tokyo, 100-8950, Japan

Phone: +81-3-3502-7466; FAX: +81-3-5511-8788

shuhei\_toriumi860@maff.go.jp Website: http://www.s.affrc.go.jp/

#### **Israel**:

Dalit Yona,

Chief Scientist Office, Ministry of Agriculture and Rural Development

P.O.Box 30, Bet Dagan 50250

Phone: +972-3-9485912; Fax: +972-3-9697193

dality@moag.gov.il

Website: www.agriscience.co.il

### Participants, project leader and coordinator:

<u>Participants:</u> all scientists involved in the project and responsible to carry out the identified tasks listed on the budget application forms

<u>Japan (JN):</u> Principal Investigator (PI) is that participant whose name appears first on the proposal among the scientists from Japan. The Japanese PI is responsible for the submission of scientific reports, financial reports, and notification of changes in the work plan and maintaining contacts with both the Japanese and Israeli participants and International Research office of MAFF/AFFRCS.

<u>Israel (IL):</u> Principal Investigator (PI) is that participant whose name appears first on the application forms of the proposal among the scientists from Israel. The Israeli PI is responsible for



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the submission of scientific reports, notification of changes in the work plan and maintaining contacts with both the Japanese and Israeli participants and the Chief Scientist Office of MOARD.

#### **Submission Process**

#### Submission in Japan:

Online submission in Japan will be done according to the instructions and guidelines of the MAFF/AFFRC application formats. Detailed explanation of the chapters requested in the body of the proposal will appear online.

#### Submission in Israel:

Online submission in Israel will be done according to the instructions and guidelines of the Chief Scientist application formats. Detailed explanation of the chapters requested in the body of the proposal will appear online.

All proposals submitted should be written in English. Budget tables should be written in \$ and will clearly indicate the contribution requested from MAFF/AFFRCS and MOARD. The Israeli side will get the money in IL Shekels

All proposal documents and related information may be shared by the JN and IL offices.

#### The Proposal

Detailed Description of the Research Plan - Limited to 15 pages, including figures, CV's, photos and any additional material.

#### 1. Background:

- Statement of the research problem and its general background.
- Hypotheses and their rationale.

#### 2. Research plan

- Strategies, procedures and methodologies used in addressing the questions asked.
- Specific experiments to be conducted and a discussion of their potential pitfalls and possible alternatives.
- 3. Joint activities, milestones, expected deliverables, exchange of knowledge.
- 4. Description of the expected results, the significance of their anticipated contributions to the agriculture/environment of Japan and Israel and the added value of the bilateral cooperation



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The above sections 3&4 should include, among others, the following:

- ⇒ **Duration and Timetable of the Work Plan:** the project duration must not exceed 3 years. A timetable (milestones) of the work plan describing the division of the research tasks between the Israeli and Japanese participants for each year of the project must be provided together with a list of expected deliverables. A graphic or tabular presentation is recommended.
- ⇒ **Details of Cooperation** The proposal, jointly prepared, should clearly indicate the anticipated cooperative endeavors between the partners, including the work to be done in each country and the responsibility of each collaborator. Explain how the cooperating scientists contribute their expertise to the joint efforts.

The quality of cooperation is scored by reviewers and panels in their evaluation of the proposal. Types of cooperation are defined below: The highest value is given to synergistic cooperation.

*Synergistic*: Each scientist contributes a specific expertise, facility, or equipment that the other partner cannot contribute and without which the final realization of hypothesis testing could not be achieved.

Complementary: Each scientist performs essentially the same research using different (biological) systems or methods, thus, widening the scope and strengthening the validity of the results.

Supportive: Collaborators with essentially the same expertise divide the research tasks between the laboratories.

- **5. Facilities**: briefly detail the facilities to be dedicated to the project.
- 6. Relevant Bibliography
- 7. Curriculum Vitae: Do not exceed one page for each investigator. Provide academic background, research experience, recent, relevant publications or patents.

Tables, figures, etc. are counted in the 'Detailed Description of the Research Plan'

#### DO NOT EXEED THE 15 PAGES LIMIT

8. Budget (all sums in \$\$)



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Description of the Budget - The proposed budget requirements are different at MAFF/AFFRCS and MOARD; the requested budget details must comply with the specific requirements of the respective granting agency.

The Japanese grant recipient institutions must follow the requirements stated in the MAFF/AFFRCS call for proposals, and the Israeli grant recipient institutions must follow the requirements stated in the updated regulatory procedures of the Chief Scientist of MOARD call for 2017.

### **Intellectual Properties Rights (IPR)**

Subject to the national laws of Japan and Israel, the institution of the partners to a specific project from which IPR have arisen as a result of their joint activity will be entitled to, or irrevocably licensed to use, the said IPR. Specific allocation of the said IPR between the said institutions will be set out, by mutual consent, in separate consortium Memoranda between them, prior to the commencement of any joint activity from which a potential IPR is expected to result. The relevant institutions winning the budgets are strongly recommended and encouraged to reach and sign a consortium agreement dealing, among others, also with the distribution of the IPR, whenever a potential IPR is expected to be derived from the granted project.

#### **Evaluation of research proposals**

Proposals will be evaluated by disciplinary evaluation panels. As the first step, evaluations will take place simultaneously and independently by parallel panels in Japan and Israel. Then, as the second step, the representatives of both panels will conduct evaluation jointly based on the result of the first step. Panel members are scientists competent in the relevant area of research. If necessary, panel members will forward the application for outside (ad-hoc) reviewers for evaluation. Ad-hoc evaluations will be solicited by the program's administrations. Both the Japanese and Israeli corresponding panels will receive all such reviewers' comments.

Both panels and ad-hoc reviewers rank the proposals. The panel prepares a written evaluation for each proposal (Strengths, Weaknesses) and a recommendation. Panel members score all proposals according to a common set of criteria and weighting grid for each criterion (Japanese panel's evaluation at the first step will be conducted according to a different set of criteria. See MAFF/AFFRCS call for proposals.).

The following criteria will be scored:

- The scientific and technological merit of the proposal. (40%)
- The feasibility of the objectives. (20%)



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- The quality of the cooperation and the suitability of the participants' teams and their facilities. (20%)
- The anticipated benefits to agriculture and or the environment and the uniqueness brought by the joint Japan-Israel collaboration. (20%)

Based on the result of the joint evaluation, MAFF/AFFRCS and MOARD will make the final funding decisions.

#### **Notification of Awards**

Notification of Awards will be sent to the project PI's, who will be responsible to inform the other participants and their affiliated research authorities, in writing in each country. Favourable decisions indicate the amount and duration of the grant and any conditions of support. The program's grants to Israeli institutions will be in NIS currency.

Submission deadline in Israel: 30/3/17

# Evaluation criteria at the Japan-Israel joint evaluation

Category	Criteria
No.1 The scientific and technological merit of the proposal	A The scientific and technological merit of the proposal is very high, and it is considered as a high priority research. The proposal is considered as an international joint research which is very highly needed. (40 points)
	B The scientific and technological merit of the proposal is high, and it is considered as a priority research. The proposal is considered as an international joint research which is highly needed. (30 points)
	The scientific and technological merit of the proposal is medium. The proposal is considered as an international joint research which is modestly needed. (15 points)
	D The scientific and technological merit of the proposal is low.  The proposal is considered as an international joint research which is not needed. (0 points)
No.2 The feasibility of the objectives	A The objectives and the research plan are ambitious and specific, and the feasibility of the objectives is very high. (20 points)
	B The objectives and the research plan are specific, and the feasibility of the objectives is high. (15 points)
	The objectives and the research plan are normal, and the feasibility of the objectives is medium, considering the past research outcome. (10 points)
	D The objectives and the research plan are not specific, and the feasibility of the objectives is low, considering the past research outcome. (0 point)
No.3 The quality of the cooperation and the	A The quality of the cooperation is very high. The number of researchers is sufficient and research facilities are well equipped. (20 points)

suitability of the participants' teams and their facilities.

- B The quality of the cooperation or the research organization (researcher, facility) is a little bit unfavorable but sufficient for the implementation of the proposal. (15 points)
- The quality of the cooperation or the research organization (researcher, facility) is unfavorable, and it might hinder the implementation of the proposal. (10 points)
- D The quality of the cooperation and the research organization (researcher, facility) are unfavorable, and the implementation of the proposal is not expected very well. (0 point)

#### No.4

The anticipated benefits to agriculture and/or the environment and the uniqueness brought by the joint collaboration.

- Compared to international standards, the level of novelty, creativity and innovativeness are very high. Future practical use and commercialization will be very likely. (20 points)
- B Compared to the international standards, the level of novelty, creativity and innovativeness are high. Future practical use and commercialization will be very likely. (15 points)
- C Compared to the international standards, novelty, creativity and innovativeness are modest. Future practical use and commercialization will be modestly likely. (10 points)
- D Compared to the international standards, novelty, creativity and innovativeness are low. Future practical use and commercialization will be unlikely. (0 point)