

## Call for proposals Graduate Schools Green Top Sectors TKI 2020

### Aim

The aim of this programme is to facilitate innovative and high-quality scientific research within the research field of the top sectors Agri&Food and Horticulture & Starting Materials by engaging young talented researchers at the start of their career.

### The Top Sectors

The **top sector Agri&Food** covers everything related to food, both the primary production as well as the processing, handling, marketing and distribution of food. The top sector Agri&Food encourages the development of new knowledge and innovations to make use of economic and societal opportunities. Twelve of the 40 most prominent food and beverage companies in the world have R&D activities or a business location in the Netherlands. The sector wants to retain and further expand this leading position. This concerns not only the production of sustainable and high-quality food but also sustainable food chains in which people, animals and the environment take centre stage.

**The top sector Horticulture & Starting Materials** covers all plant-based chains in the horticulture complex. It is a broad sector, with subsectors that range from vegetables, fruit and avenue trees to flowers and bulbs. Starting materials are products, such as propagating material, planting material and seeds in agriculture and horticulture. The Horticulture & Starting Material sector leads the way in the development of crops that are less sensitive to weather conditions or that require fewer crop protection agents, for example. The sector also covers companies that supply, process, trade and distribute horticulture and starting material products.

Both top sectors have stated that the availability of well-trained personnel is a top priority. The expected demand exceeds the current size of the PhD training programmes in the Netherlands. It is therefore vital for companies and organisations to attract and train talented scientists.

### Themes T&U and A&F

The research projects within this call must fit within the research missions of the Knowledge and Innovation Agendas of the top sectors. The following missions are relevant for the TKIs Agri & Food and Horticulture & Starting Materials:

- A. Circular agriculture
- B. Climate-neutral agriculture and food production
- C. Climate-resistant rural and urban areas
- D. Valued, healthy and safe food

The missions are supported by two key technologies: Smart Technologies in Agri-Horti-Water-Food and Biotechnology and Breeding.

Each mission is built up from 'Multi-year Social Innovation Programmes' (MMIPs). Each MMIP focuses on specific innovation tasks and hurdles to tackle. Also for the key technologies, MMIPs are developed.

The complete text of the Knowledge and Innovation Agenda, as well as the MMIPs can be found on the website [www.kia-landbouwwatervoedsel.nl](http://www.kia-landbouwwatervoedsel.nl).

### Available budget

A maximum of four projects can be awarded funding. Two projects can be awarded within the top sector Agri&Food and 2 projects within the top sector Horticulture & Starting Materials. The budget is available for four-year PhD projects to be carried out by knowledge institutes that work together with one or more private partners (public private partnership (PPP)). One or more public partners can also participate.

## **Who can apply**

For both A&F and T&U: Full, associate and assistant professors and other researchers with a comparable appointment can submit an application if they are employed by one of the organisations affiliated with one of the graduate schools EPS, PE&RC, WIAS or VLAG.

Applications are submitted by a principal applicant on behalf of the project consortium. There is one principal applicant per proposal; co-applicants are not permitted. If an associate or assistant professor submits the application, the name of the full professor who has declared that he or she is prepared to act as the thesis supervisor (promotor in Dutch) must be stated in the application. An exception to the required duration of appointment can be made for applicants with a "tenure track" appointment that does not cover the entire duration of the project. In such cases, the applicant should demonstrate by means of a letter that adequate supervision is guaranteed for the entire duration of the research. The proposed PhD candidate who wrote the proposal is the person who will defend the proposal at the interview and whose performance will be taken into account in the assessment.

Additional conditions for submission\*:

- The proposal must fit within the research focus of the programme, as described above;
- The candidate must have a relevant master's degree or be due to receive one shortly;
- The candidate must not already hold an appointment as a PhD student;
- Only one application per principal applicant may be submitted in this call.

\* Research to be carried out at a research group within the graduate school VLAG can only be applied for by the intended supervisor of students who participated in the 2020 VLAG Graduate Programme.

## **Project consortium, private and public partners**

All projects must be supported by a project consortium. The consortium must consist of at least one research institution - with which the principal applicant is associated and where the candidate will undertake his/her PhD research if the research proposal is successful - and at least one private partner. It is possible to involve more than one research institution and more than one private partner, as well as one or more public partners in the project consortium.

### *Definition of a private partner*

A private co-financier is an enterprise or other organization or consortium, which undertakes activities in the context of the relevant programme or project that may objectively be deemed market activities. TKI considers an enterprise to be an organizational entity or person that pursues prolonged involvement in economic intercourse through the deployment of labour and capital and with a view to generating profit. Hence, an SME is considered to be an enterprise, as is a self-employed professional registered with the chamber of commerce. Institutes with 'ANBI' status may also act as private partners. Private partners from other countries may participate in consortia.

### *Definition of a public partner*

A public co-financier is a knowledge institute or other institute that is neither an NWO-accredited knowledge institute (e.g. a heritage institute, municipal authority, intermediary organization or foundation) nor a private party (e.g. a health care foundation, health care insurer or governmental body that, in the context of its activities within the programme or project, does not act in a governmental capacity), insofar as, in its 'partner' role, it undertakes no activities that may objectively be deemed market activities.

## **What can be applied for:**

The maximum budget that can be applied for is k€ 250 per project. In view of the requirement regarding co-funding by private (and public) partners, the maximum fundable cost by TKI is 80% of the total project cost (including in-kind contributions). In the context of this call, the grant will fund one PhD student per project within a public knowledge institute.

### *Co-funding*

The private and public partners in the project consortium are required to supplement TKI funding by jointly covering at least 20% (and up to 50%) of the total project cost, of which at least 40% (8% of the total project cost) must be in cash.

Formal demands TKI financing (in Dutch):

- Deelnemers gaan correct met de rechten op de resultaten om. Resultaten worden publiek gemaakt (proefschrift). Eventueel – voor de volledigheid - deelnemende ondernemers kunnen rechten op de resultaten van de onderzoeksorganisatie tegen marktconforme condities verkrijgen;
- Er is een schriftelijke ondertekende samenwerkingsovereenkomst;
- Er is daadwerkelijk sprake van samenwerking tussen bedrijven en onderzoekers, dit moet blijken uit het projectplan;
- Het project draagt bij aan de Nederlandse kennisinfrastructuur via deelname van minimaal één Nederlandse kennisinstelling;
- Het project draagt inhoudelijk bij aan het TKI-programma door aan te sluiten bij de KIA Landbouw, Water, Voedsel;
- Verder gelden de algemene voorwaarden voor de inzet van programmatoeslag m.b.t. subsidiabele kosten (appendix 1, in Dutch).

### **Additional provisions 20% co-funding**

Each proposal requires co-funding by at least one private partner. In addition, multiple private and/or public parties may participate in the consortium.

### *Definitions*

- Total project cost: total cash requirement plus in-kind contributions.
- Financial resources: TKI funding plus cash co-funding.
- Co-funding: cash contributions plus in-kind contributions by partners.
- In-kind contributions: capitalized personnel and/or material contributions by partners.

### *Budget*

The private and public partners in the project consortium are required to supplement TKI funding by jointly covering at least 20% (and up to 50%) of the total project cost, of which at least 40% (8% of the total project cost) must be in cash.

In the case that the maximum TKI grant is applied for, the total project budget will be as follows:

Requested TKI budget:	k€ 250 (80%)
Required cash contribution:	k€ 25 (8%)
Required in-kind contribution:	k€ 37.5 (12%)
Total project budget:	k€ 312.5 (100%)

A smaller in-kind contribution is permissible if compensated by a higher cash contribution, so that the grant-partner contribution ratio is as indicated above. Additional cash and/or in-kind contributions that result in the private contribution exceeding 20% are permitted, up to a maximum of 50% of the total project cost. The maximum project value is therefore k€ 500. A project consortium may involve multiple private and public partners. The contributions of the various partners may be valued collectively. No requirements are made regarding the types and proportions of the contributions that individual partners must make to the matching sum, providing that the total matching is in the required proportion to TKI funding. Cash contributions and in-kind contributions must be accounted for retrospectively by applicants. The forms of in-kind contribution accepted by TKI are personnel time input and material contributions, such as use of specific infrastructure, software and access to facilities. Acceptance is subject to the condition that the contributions are capitalized and incorporated into the project plan.

The contributions to be made by the private and public partners must be made clear in the project description, the timetable and the budget submitted with the application. Project management, oversight, coordination and consultancy may not be included in the matching contributions.

#### *General co-funding provisions*

- Enterprises and other co-funding parties are not eligible to receive TKI funding, but may contribute to the research in cash (and/or in-kind, where applicable). They may not receive grant funds from the project.
- An academic applicant cannot therefore represent an enterprise.
- Contributions and input made in-kind must be essential to the project and must be included in the research budget submitted with the grant application for the project in question and approved by TKI.
- The application must be accompanied by a letter of commitment from each member of the consortium setting out the contributions to be made in cash and in-kind by that party. The letter of commitment must be written in English and must contain an explicit statement of the agreed financial (cash) contribution or capitalized personnel and/or material contribution (in-kind contribution). It must be signed by a person who is authorized to represent the party in question and written on that party's headed notepaper. One letter of commitment for each partner must be appended to the application.
- Contributions in cash and in-kind that are included in the project budget must correspond to the letters of commitment in which the co-financier(s) declare to TKI that the contributions will be made.

The applying institute will invoice the consortium's private and/or public co-financers for their promised cash co-funding. Following receipt, the cash contributions will be made available to the applicant university/research institute.

#### **Criteria**

Applications are assessed on the basis of the following criteria:

1. Quality of the candidate and research group;
2. Scientific quality of the proposal;
3. Research relevance and perspectives for utilisation.

The three criteria are given equal weight in the final score for the application.

Scores on a scale from 1 (excellent) to 9 (poor) will be used. A separate score is provided for each criterion. To be eligible for funding, the final score of the application should be very good or higher.

#### *Criterion 1: Quality of the candidate and research group*

The assessment of the intended PhD candidate weighs very heavily within this criterion. Points of attention for the assessment are:

- the motivation and persuasiveness of the candidate;
- the candidate's curriculum vitae (education, grades obtained, extracurricular activities);
- the letters of recommendation;
- the degree to which the candidate places the research in a broader context including the context of a private party.

In addition, for this criterion, the quality and suitability of the research group as a whole will be examined: does the research group have sufficient expertise, the right collaborations and access to the required equipment?

#### *Criterion 2: Scientific quality of the proposal*

This includes:

- the clarity of the proposal, questions posed and the objectives;
- scientifically innovative and/or groundbreaking elements;
- the scientific approach: (challenge in) the approach and its feasibility;

- the effectiveness in terms of methodology proposed.

#### *Criterion 3: Research relevance and perspectives for utilisation*

The research relevance of the proposal is determined by the extent to which the proposal fits in the research focus of the programme Graduate School Green Top Sectors.

So far as the perspectives for utilisation are concerned, realising an application during the duration of the projects is not a requirement, but perspectives for an application must be present. Points of attention for the assessment are:

- does the proposal provide a convincing perspective of a contribution to the required fundamental knowledge basis that underlies innovative solutions for societal and economic issues within the top sector Agri&Food or the top sector Horticulture & Starting Materials?
- does the proposal provide a realistic picture of the utilisation possibilities and a concrete action plan for these?
- the involvement and suitability of the public and private partners in the project.

### **Procedure**

#### **Eligibility of applications**

The first step in the assessment procedure is to test whether an application is admissible. Only those proposals that satisfy the criteria described above are admissible and will be taken into consideration.

TKI will not consider any applications to which one or more of the following aspects applies:

- the application has not been correctly or fully completed, and the applicant has not, or has not on time, satisfied the request to submit a corrected application;
- the application has not been written in English;
- the principal applicant does not satisfy the description as stated in the call;
- the application is not in line with the aim and themes of this call;
- the application was submitted after the deadline.

If the application can be corrected, the applicant will be given the opportunity to submit a revised application within 48 hours. If the application has not been corrected by that deadline, the proposal will not be accepted for processing. Revised applications will be accepted for processing once they have been approved.

#### **Assessment of applications**

Two committees, one for A&F and one for T&U will be appointed to evaluate the proposals. After the deadline the proposals will be divided over T&U and A&F. No use of external referees' reports will be made in this process.

The selection committee will consist of scientists with relevant expertise and will be complemented with one or more members who represent the top sectors. Two graduate school representatives will act as secretaries of the committees.

The consideration of applications will be in two stages:

#### *Phase 1: Written assessment*

The committee members will assess the individual applications based on the assessment criteria. They will give a provisional score and itemise for themselves which parts should be clarified, explained or described in greater detail during a possible interview.

#### *Phase 2: Interview*

Interview selection:

Based on the written assessment (phase 1), a provisional ranking will be made by the selection committee. The candidates with the highest ranks will be invited for an interview.

#### Interview:

The proposed PhD candidate will explain his or her application to the selection committee. The committee members will ask questions about the project and the candidate's curriculum vitae and motivation. After each interview, the members of the selection committee will discuss the proposal, the interview and the candidate's curriculum vitae and score their individual impressions on a form. Once all of the interviews have been completed, the committee members will discuss the applications on the basis of the assessment criteria, which will result in a ranking of all applications. The interview is therefore an integral part of the assessment and may lead to a re-evaluation of the written assessment of the proposals, as they were scored in phase 1.

#### *Ranking*

In view of the allocation of the available grant budget between projects that fall under the top sector Agri&Food and projects that fall under the top sector Horticulture & Starting Materials, the two committees will make two separate final rankings. Both top sectors would like to see that the projects awarded funding are a good reflection of the entire breadth of the top sector concerned. Therefore, based on policy considerations, the committee can give due consideration to a proper distribution across the scientific disciplines and related research schools when making a ranking.

#### *Decision*

The TKI Board will take a decision based on the selection committee's advice. The TKI Board reserves the right not to use all of the available budget depending on the quality of the proposals received.

#### **Planning:**

Deadline for applications:	<b>15 September 2020</b>
Interviews:	October 2020
Decision:	End of October 2020

Applicants should send their applications by e-mail to [Ingrid.Vleghels@wur.nl](mailto:Ingrid.Vleghels@wur.nl).

#### **An application should include:**

- The application form;
- Letters from the consortium partners in which they tangibly confirm the nature and value of their contributions to the project;
- Two letters of recommendation: The letters should at least say something about the candidate's academic merits and motivation with regard to the conduct of scientific research. Candidates may choose who they ask to write the letters of recommendation. The principal applicant or the intended thesis supervisor cannot write one of the letters of recommendation.

## Appendix 1: Subsidiabele kosten voor samenwerkingsprojecten

De subsidiabele kosten in samenwerkingsprojecten zijn:

- personeelskosten: onderzoekers, technici en ander ondersteunend personeel voor zover zij zich met het onderzoeksproject bezighouden;
- kosten van apparatuur en uitrusting voor zover en zolang zij worden gebruikt voor het project. Wanneer deze apparatuur en uitrusting niet tijdens hun volledige levensduur voor het project worden gebruikt, worden alleen de afschrijvingskosten overeenstemmend met de looptijd van het project, berekend volgens algemeen erkende boekhoudkundige beginselen, als in aanmerking komende kosten beschouwd;
- kosten van gebouwen en gronden voor zover en zolang zij worden gebruikt voor het project. Wat gebouwen betreft, worden alleen de afschrijvingskosten overeenstemmend met de looptijd van het project, berekend volgens algemeen erkende boekhoudkundige beginselen, als in aanmerking komende kosten beschouwd. Wat gronden betreft, komen de kosten voor de commerciële overdracht of de daadwerkelijk gemaakte kapitaalkosten in aanmerking;
- kosten van contractonderzoek, kennis en octrooien die op arm's length-voorwaarden worden gekocht bij of waarvoor een licentie wordt verleend door externe bronnen, alsmede kosten voor consultancy en gelijkwaardige diensten die uitsluitend voor het project worden gebruikt;
- bijkomende algemene kosten en andere operationele uitgaven, waaronder die voor materiaal, leveranties en dergelijke producten, die rechtstreeks uit het project voortvloeien.

Er zijn drie standaardmethoden van berekenen subsidiabele kosten

1. de integrale kostensystematiek,
2. de loonkosten plus vaste-opslag-systematiek,
3. de vaste-uurtarief-systematiek

Ad 1. Indien de aanvrager kiest voor de **integrale kostensystematiek**, berekent de aanvrager de directe en indirecte kosten per kostendrager in een tarief per eenheid van deze kostendrager. De subsidiabele kosten worden berekend door het aantal eenheden van de kostendragers te vermenigvuldigen met de ingevolge de eerste zin berekende tarief, vermeerderd met de aan derden betaalde kosten voor zover deze geen deel uitmaken van het ingevolge het eerste lid vastgestelde tarief.

Ad 2. Indien de aanvrager kiest voor de **loonkosten plus vaste-opslagsystematiek**, worden de subsidiabele kosten berekend door de directe loonkosten per uur te vermenigvuldigen met het aantal uren dat de direct bij de subsidiabele activiteiten betrokken personen ten behoeve van deze activiteiten hebben gemaakt, vermeerderd met:

- a. een vaste opslag voor indirecte kosten van 50% van de loonkosten;
- b. de kosten van het gebruik van apparatuur en de kosten van verbruikte materialen indien deze in de administratie te onderscheiden zijn;
- c. de aan derden betaalde kosten.

Ad 3. Indien de aanvrager kiest voor de **vaste-uurtarief-systematiek**, worden de subsidiabele kosten berekend door het aantal uren dat de direct bij de subsidiabele activiteiten betrokken personen ten behoeve van deze activiteiten hebben gemaakt te vermenigvuldigen met een vast uurtarief van € 60 waarin zowel de directe loonkosten als daaraan toegerekende indirecte kosten zijn begrepen, vermeerderd met:

- a. de kosten van het gebruik van apparatuur en de kosten van verbruikte materialen indien deze in de administratie te onderscheiden zijn;
- b. de aan derden betaalde kosten.