Dear colleagues,

FCiências.ID - Associação para a Investigação e Desenvolvimento de Ciências is offering a **post-doctoral position in participatory climate scenarios and land use modelling**, with a focus on decision-making aspects. The successful applicant will join a transdisciplinary team at Instituto Dom Luiz (IDL) within the Faculty of Sciences of the University of Lisbon working on the Horizon Europe WorldTrans Project. As a participant in all project Work Packages, IDL undertakes evidence-based research to inform the development of new methods to explore the societal relevance of environmental issues in educational and policy settings. IDL key research contributions involve modelling and analysing societal responses to the climate challenge and consequences for several sectoral areas, namely in the energy, finance, economy, agriculture, health and energy sectors.. IDL is also contributing cutting-edge research on developing climate-related financial risk assessment frameworks that are firmly based on natural and social sciences. This project examines climate finance relevant for the representation in FRIDA (a new systems dynamics model) of feedback loops linking climate damages and human behaviour to finance-economy models and including co-benefits and trade-offs of climate (in)action.

Main tasks and responsibilities:

The successful applicant will work with the IDL team and other partners in the WorldTrans project on Climate Finance & Investments topics vital to inform investment strategies and capital allocation in an uncertain future. This post-doc position plays a key role in IDL's participation in all aspects of the ongoing project. The work plan is included in all Work Packages of the project WorldTrans that have the participation of FCiências.ID and will include the following tasks that explore:

1. Contribute to development of food systems transitions through the lenses of livestock systems, climate change, finance, and health (both human and planetary)
2. Develop scenarios for food systems transformations, especially livestock transitions and resulting agricultural emission trajectories, driven and constrained by producer behaviour and finance.
3. Help develop methodologies to describe climate feedbacks on the economy, the financial sector, and human behaviour, and implement these into the World Trans model;
4. Interact with the integrated assessment modelling community through activities aimed at improving the representation of livestock and proper communication of results from these models.
5. Review and critically analyse methods used and resulting model structure of existing models and contribute to the collaborative development of the WorldTrans IAM.
6. Lead and contribute to project outputs including scientific papers, policy briefs, deliverables, etc. Participate in international conferences to disseminate project outputs.
7. Playing a leading role in IDL's contribution to the development of a new systems dynamics integrated assessment model (FRIDA)
8. Developing an interactive learning environment (ILE) to support the dissemination of systems thinking approaches to solve multidimensional challenges for food systems transformation;
9. how FRIDA can be used in the testing of hypotheses and insights gathered in 1-4 and contribute to the development of FRIDA in close coordination with the WordlTrans consortium members;
10. Leading and supporting the writing of academic papers, reports, policy briefs and other project deliverables;
11. Help organize and participate in meetings, workshops and co-creation labs to meet the objectives of the project.

Qualifications and experience:

- Portuguese nationals, foreign and stateless persons may submit applications to this selection procedure, provided they hold a doctoral degree1 in Earth Sciences, Life Sciences, Economics, Finance, Climate change and Environmental modelling, or similar areas, have

expertise in the field of sustainability transitions (or associated fields, and fully comply with the following requirements:

a) The PhD must have been granted at least 1 year ago;
b) Experience in Big Data acquisition and processing - information provided in the CV and/or in the motivation letter;
c) Knowledge of computer programming (e.g with system dynamics, R or python) and use of spreadsheets (e.g. Excel) - information provided in the CV and/or in the motivation letter;
d) Demonstrated in-depth knowledge of programming languages (e.g. system dynamics, GAMS, R or Python) and spatial analysis tools - information provided in the CV and/or in the motivation letter.

- Additional qualifications desirable in the successful candidate include:

a) Demonstrated scientific and/or professional experience in the area of numerical modelling, climate change, climate economics, climate policy, land use change and agriculture - information provided in the CV and/or in the motivation letter;
b) Demonstrated scientific experience in the aforementioned topics by a minimum number of one (1) publications as 1st author in international scientific journals, conference annals, or policy reports in the scientific areas of this call for applications - information provided in the CV and/or letter of motivation;
c) R&D activity experience with livestock and agricultural systems technoeconomic modelling - information provided on the CV and/or in the motivation letter;
d) Experience with topics in climate finance and agricultural economics - information provided on the CV and/or in the motivation letter;
e) Experience in the participation in national and/or international scientific projects in the scientific areas of this call for applications - information provided on the CV and/or in the motivation letter;
f) Strong writing skills - information provided in the CV and/or in the motivation letter;
g) Fluency in English language (written and spoken) - information provided in the CV and/or in the motivation letter.

Appointment terms:

The selected candidate should be available to take up the position as soon as possible. We offer a full-time indefinite duration fixed-term employment contract, on an exclusive regime, expected to start in July 2024, and have an expected duration of 29 months.

Duties will be carried out at the IDL premises in Lisbon, Portugal.

Further details can be found in the attached vacancy announcement and on the Euraxess website.

Deadline for receipt of applications: 05 July 2024.

We welcome your application if this suits your interests and/or also ask you to assist us in attracting as many potential candidates as possible by sharing this information with your networks.

Best wishes,

Dr Alexandre Köberle
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