



Soutenir l'apprentissage et les formations sur l'eau à Madagascar Strengthen Higher Education in WASH in Madagascar

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Stakes: Extreme poverty...

- ▶ 75% of population below poverty threshold ($\leq 1.9\$$ a day).
- ▶ 50% of children suffer from growth delay due to malnutrition.
- ▶ 76% of population does not have permanent access to safe drinking water
- ▶ 63% of population does not have access to sanitation

Sources: [1,5,6,7]

...confronting global change

- ▶ Lack of water and the difficulty of groundwater prospecting in the semi-arid region of the southwest [2],
- ▶ Global Change which induces modifications in the agricultural use of water in the rural areas of the Highlands [3]
- ▶ Water pollution and lack of waste management that make resources unsuitable especially in urban areas [4]

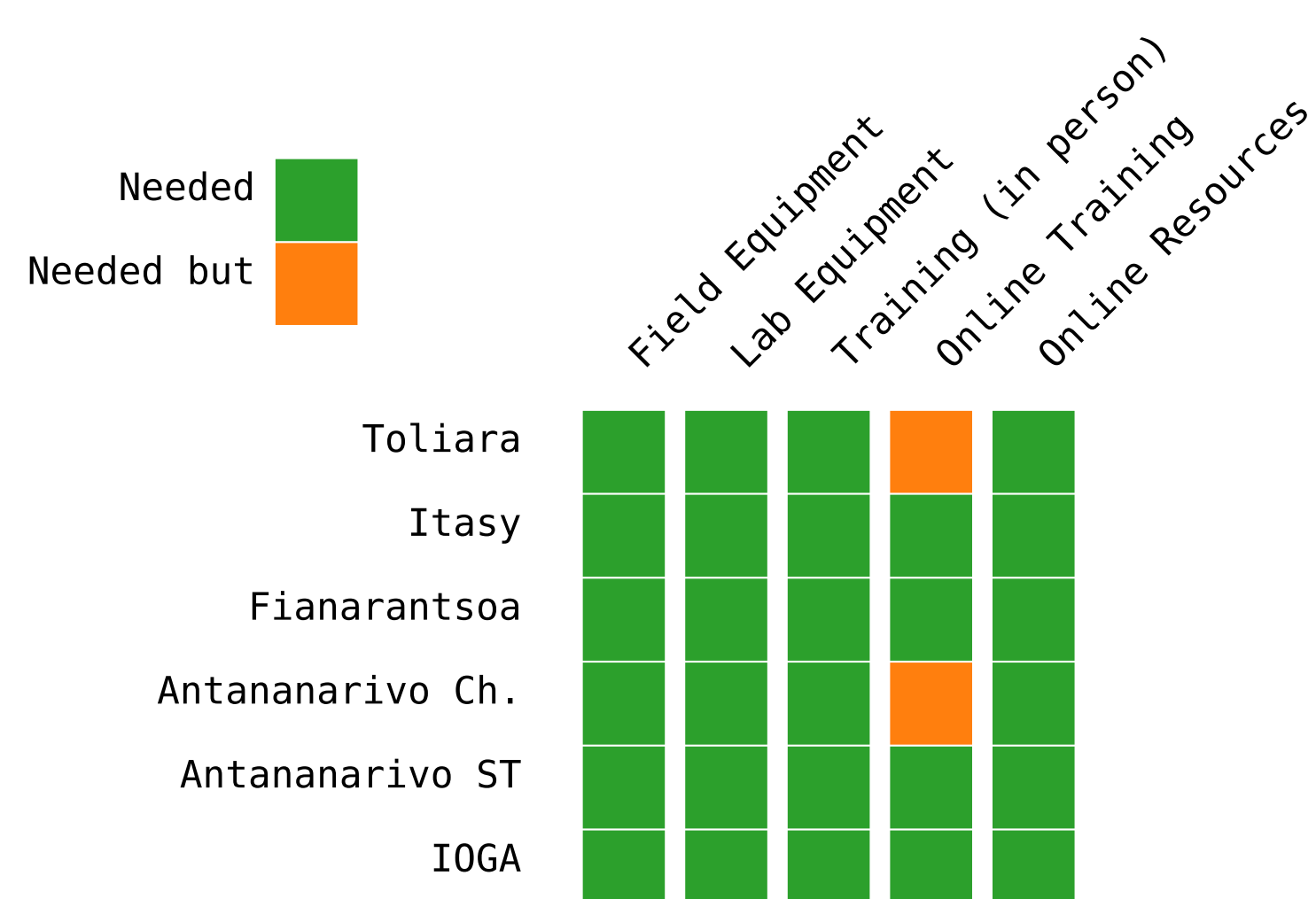


If things go on

- ▶ The chances for Madagascar to meet SDGs are slim
- ▶ **Only the formation of hundreds of competent professionals (technicians and engineers) can change the game**

Needs

- ▶ Survey performed in 2020 and 2021
- ▶ 7 Undergraduate programs
- ▶ 8 Graduate programs

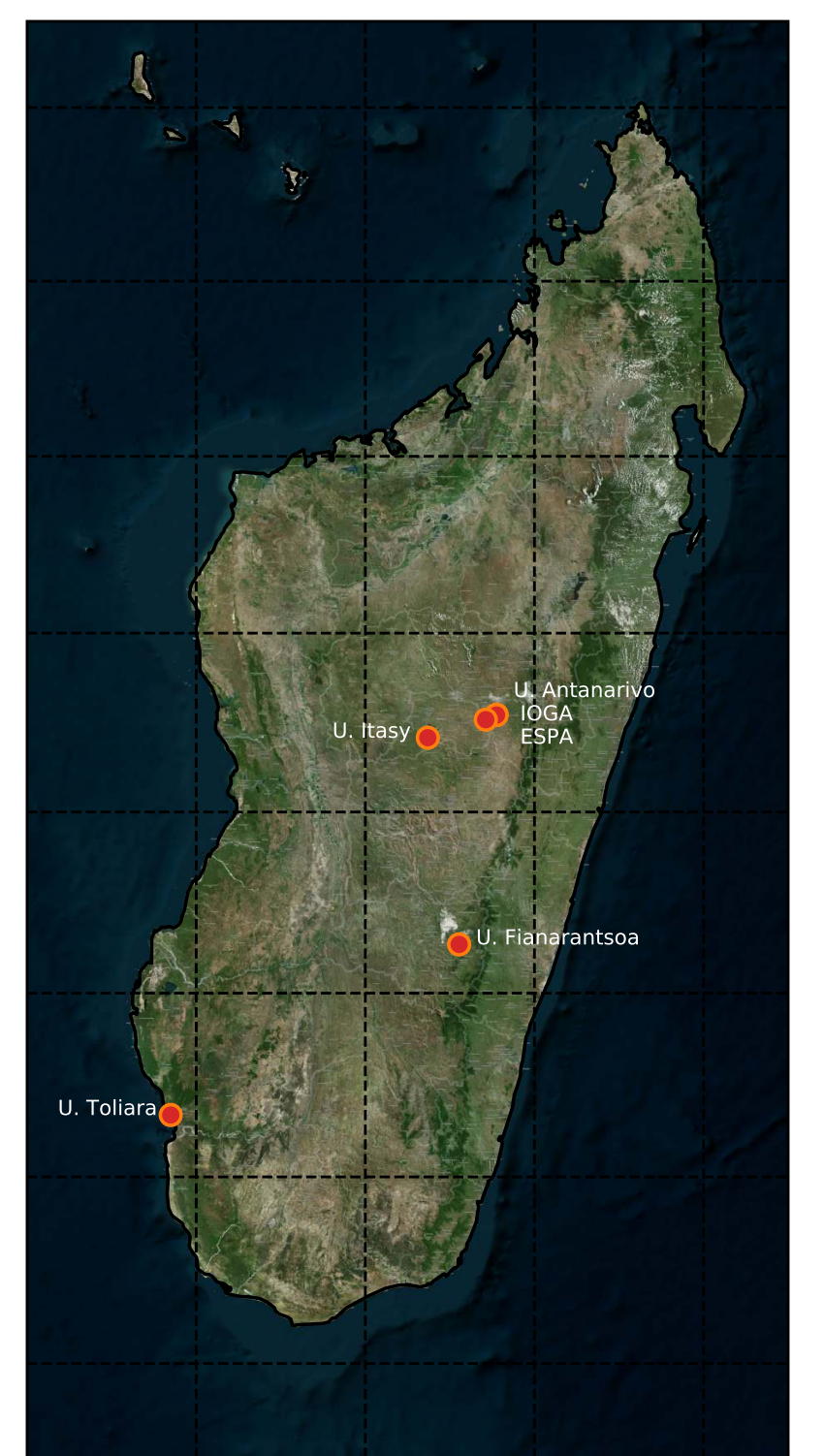


SAFE's Objectives

1. Provide Malagasy academics with **the material resources** for vocational training of quality.
2. Support academics in **setting up associated courses and curricula**.
3. Promote **the integration of professionals** from the WASH sector into the training offer.
4. Support development of **self-financing** (service offer, continuing education, work-study).
5. **Advance knowledge** of water resources in a context of global change.

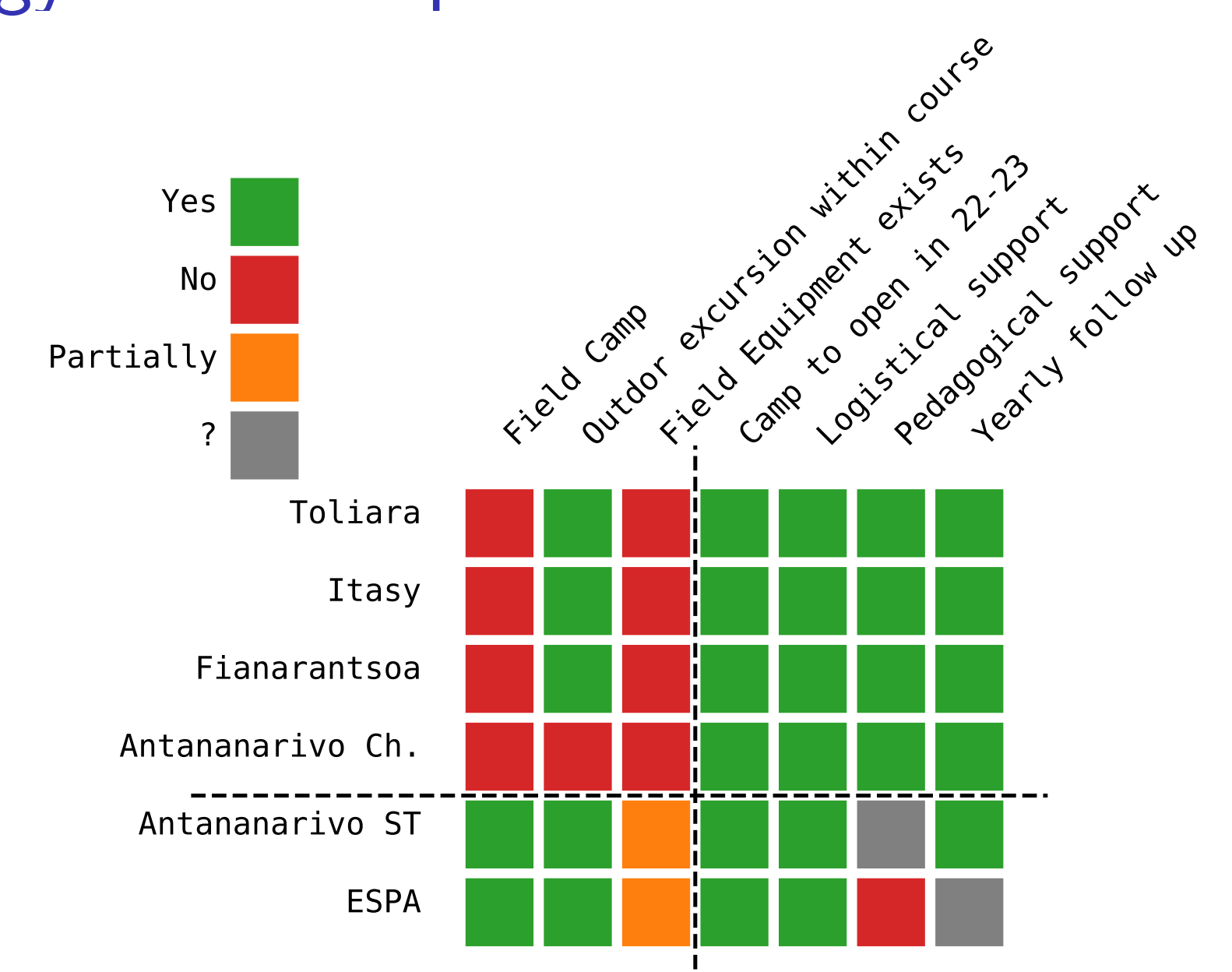
Beneficiaries

- ▶ Short term: between 700 & 1000 students in 4 universities.
- ▶ Medium term: businesses, administrations, NGOs
- ▶ Long term: Malgasy population.



Actions in 2022: Hydrology Field camps

1. Equip each partner with basic field measurement devices (piezometers etc.),
2. Help with pertinent site selection,
3. Participate to field camps
4. Give feedbacks.



References

- [1] The World Bank. 2020.: <https://data.worldbank.org/indicator/SI.POV.NAHC?end=2019&start=1985> [Accessed 11 May 2020]. [2] CARRIÈRE, S.D., et al., 2018. Environmental Earth Sciences, 77(21), p.734. JIA, G., et al., 2019. IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. [3] HERIARIVONY, C., et al., 2015. LARHYSS Journal P-ISSN 1112-3680/E-ISSN 2521-9782, (24), p.7-17. [4] ANDRIANIRINA, S., et al., 2020. Afrique SCIENCE, 16(2), pp.217-228. DABAT, M. H., et al., 2010. [VertigO] La revue électronique en sciences de l'environnement, 10(2), 0-0. BASTARAU, A., 2019. Thèse Univ. Paris Saclay. RAKOTO N., et al., 2020. Environmental and Water Sciences, Public Health & Territorial Intelligence, Vol 4, N°2, pp 376-394. [5] INSTAT. Annuaire du secteur eau potable & assainissement, 2013. [6] INSTAT-UNICEF. Madagascar, Eau de boisson, assainissement, hygiène. Multiple Indicator Cluster Survey, 2018. [7] KNOEMA. Madagascar - poverty headcount ratio at 1.9\$ a day, 2021.