

Your Name and organization:

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Organizational Context Analysis

The mission of your organization and how training contributes the mission

- *A general statement about the mission of the organization of which your department is a part*

IBIMET-CNR is part of the National Research Council, the largest public research institution in Italy. The mission of the National Research Council is to perform research in its own Institutes, to promote innovation and competitiveness of the national industrial system, to promote the internationalization of the national research system, to provide technologies and solutions to emerging public and private needs, to advise Government and other public bodies, and to contribute to the qualification of human resources. CNR develops its activities in collaboration with Academic institutions, and it promotes the collaboration in scientific and technological fields with equivalent organizations in other Countries (European and non-European).

In this framework, IBIMET works to define strategies, develop technologies and explore practical solutions to contribute to the resilience and sustainability related to food, climatic, meteorological and energy emergencies, which are interconnected through a series of key deliverables.

Stakeholders

- *Who are your primary and secondary stakeholders?*

CNR Primary stakeholder is the Ministry of University and Scientific Research, while Secondary stakeholders are National and Regional Authorities and the EU bodies.

Specific stakeholders of IBIMET are the Government and public bodies, local Authorities, Farmers Associations, SME, Insurance Companies

- *What audiences of learners do you serve?*

CNR has its own scholarship and research fellowship programmes but carries out also educational and training activities in PhD courses and in advanced post-doc specialization courses and reconfirmation of qualification for selected professionals (insurance companies agents, secondary school teachers...). IBIMET is a WMO RTC and it serves personnel from NMHS mainly from RA I and RA VI in agrometeorology, applied climatology and meteorology fields.

How you promote your education and training services

- *Strategies you use internally and externally to promote your services within and outside your organization*

Internal training is promoted through specific training programmes developed by each Institute belonging to the National Research Council, and sometimes centralized, but mainly for the Administration.

External training is promoted through the collaborations with Universities, locally or through the national and international research networks.

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IBIMET promotes its RTC training activities through the WMO ETRP, but also directly thanks to its relationship with the NMHS of Mediterranean and African Countries. Research for Development and cooperation programmes are one of the tools used to promote training services, mainly for the on-the-job training approaches. Indeed IBIMET-RTC doesn't have specific funds for training, and national services have few resources for it except WMO funded fellows, cooperation and research programmes/projects are often the only resources for training activities. The participation in scientific and operational networks for climate services (such as MedCOF and PRESANORD for seasonal forecasts) is another effective way to promote our training services.

Training and education activities are also promoted through contacts with different groups of potential audiences: farmers associations, insurance companies, personnel of meteorological services other than the NMS, professionals working in urban planning, secondary school teachers, personnel from the national health service.

Factors causing change in your organization

- *What political, economic, social, and technological changes determine what your organization will be doing in the near future?*

The Institute is part of the National Research Council and it works under the umbrella of one of its seven departments: the Bio-Agrifood department (DISBA), therefore the main directions are designed by DISBA, although the Institute has specific characteristics which put it in a strong/stable position in terms of fund raising.

The second issue is the (lack of) financial support which can determine what our Institute will be doing in the near future, although the ability to implement national/international projects ensure continuity to the research and training activities

In the last few years, with the economic crisis affecting Italy, public financial resources are more and more aleatory. Most of the personnel, including scientific senior staff, involved in research and training activities don't have a permanent job, while short-term contracts connected to specific projects are the most common. As a consequence we have high rate of turnover, also because the National law doesn't allow renewing short-term contracts indefinitely. From this point of view there is a growing need of internal on-the-job training of new personnel which has been guaranteed up to now by senior staff. This condition will held until when the ratio skilled/unskilled staff will reach a threshold beyond which senior staff cannot guarantee appropriate support to junior scientists.

Concerning external training we can provide to third parts, the resources are limited, since training is not the main mission for the National Research Council. However, due to the expertise in specific fields, IBIMET and RTC-IBIMET can serve different audiences on demand offering high level courses (secondary school teachers, insurance companies, farmers associations, etc)

Trends in education and training the impact you

- *Which trends are you adapting to or implementing for how you conduct training?*

For internal training we are training to exploit all the available resources for formal training, including collaborations with Universities for PhD courses. As we have the chance to be present in different Italian cities with important universities such as Roma, Firenze, Bologna and Sassari, the collaboration is effective.

What cannot be ensured by formal training is approached with on-the-job training, establishing micro-teams composed by junior staff with different skills. Our activities are really multi and interdisciplinary and we ask to junior staff to develop the ability to work in inter/multidisciplinary groups, having in mind first the complexity of the issue and then dive in the specific of different disciplines. The micro-teams are

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supervised by a senior staff with the support of others on demand for specific issues. That seems to work better than assigning directly each younger staff to just one senior.

Your strategic learning plan

- *Do you have a strategic learning plan? If so, share how it describes your strategy for meeting organizational goals.*

No we don't really have a strategic learning plan. Internally, being dependent by projects, we are trying just to optimize the needs among different and synergic projects. But it is a temporary vision of the problem that can change in any moment due to a new project or the loss of already trained personnel.

Externally, the informal strategy is to work with a consolidated group of countries and services, for which we can monitor the training needs and develop together the most appropriate strategies coherently with the available resources by our and by their side. One of the most critical points is to keep strong relations, formal but also informal, such as personal contacts, facilitated by scientific conferences, project meetings, etc. Also long training stays of third countries staff in IBIMET contributes to strengthen such relations, such as we did last year with 6 fellows from Egypt and Tunisia. For the RTC we grow also strategic alliances with other RTC, such as the AGRHYMET Regional Center in Niamey, useful for synergies and for enlarging the group of countries with consolidated relations.

Facilities and technologies

- *What key facility and technological decisions have you made recently? Are they delivering the benefits anticipated? Why or why not?*
- *What new changes in facilities or technologies do you anticipate making in the near future?*

The main decisions we made for improving the quality of the training process are two. The first concerns the learning solutions we are able to provide. Recently we had the opportunity to use the Moodle platform of WMO ETRP for integrating traditional face to face training with distance learning. Thanks to this first attempt and considering the advantages of integrating distant and face-to-face learning we decided to invest in a in-house Moodle platform. We are now collaborating with another CNR institute who already manages a Moodle platform, and we recently had an internal training course on how to use it. We now started to migrate the material from the WMO-ETR platform to the CNR platform.

The second decision concerns the formalization of a learning needs assessment process among our institutional beneficiaries (NMS of Mediterranean and West Africa Regions). We are attempting a first assessment of learning needs concerning Seasonal forecasts application in the Mediterranean, adopting an integrated approach questionnaire+focus groups, thanks to the opportunity to meet our beneficiaries in sectorial conferences.

How do you ensure the quality of your services?

- *List the procedures you have in place for quality assurance.*

We don't follow a codified QMS. Concerning external training we usually apply assessments on the training process, up to level 2 of Kirkpatrick model. But we clearly should improve the assessment and evaluation process and our training/education activities might be better monitored and evaluated in order to improve the quality of the services offered. In particular we do not have full time trainers/educators, and most of the personnel is working as part-time/on-demand trainer therefore some train the trainers activity would be very important in our case.