

Financing water professional training to develop competencies: A fruitful economic strategy for water utilities

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Training, expenditure or investment?

It is associated **human capital** with a wide range of economic and non-economic benefits.

Indeed, some of the biggest benefits may be non-economic including improved health, longer lives, and the possibility of greater involvement in the community.

Economically, human capital revenue can be understood in terms of individual prosperity and national economy.

At the individual level, revenues tend to increase sharply as the educational level of people rises. In some OECD countries, such as Denmark and New Zealand, revenues for people with university education are about 25% larger than those of people who only finish high school.

The national economies, meanwhile, can see an increase in performance of 3 to 6 percent for each additional year of education.

Some Success Mexican Cases

Many elements are associated with the success of an economical strategy but for the purpose of the session I´m going to focus on two: human resources and technological change.

In México some experiences can show the value of the convenience of investment in human resources and technological change, we understand that these both items can't be disassociated.

Example of these are the Water Utilities organisms in Monterrey and Mexicali, in the north of the country and Leon in the center region.

These organisms changed their Plan of action basically having in account these elements as part of the Economical Strategy and right now all of them have fruitful results, even more, at this moment they are part of a line to share their knowledge and good experiences, because they pass from the deficit to surplus utilities.

The Mexican Institute of Water Technology has been part of the process.

The Mexican Institute of Water Technology (IMTA) works in three different lines in what regards to develop human capital:

- ✓ **Certification of labor skills**
- ✓ **Continuing education**
- ✓ **Postgraduate studies**

That means the IMTA covers whole spectrum of possibilities, from technicians who need ***certify*** his skills, professionals who need ***continuous education*** in order to improve his productivity, and others professionals who have the inspiration for ***postgraduate studies***.

Certification of labor skills

The aim is to promote the **development of human capital**, by strengthening their knowledge, skills and abilities that allow ***certify their labor skills*** based on a standard of competence, according to the roles they play in their field of work.

Capacity building of staff is a key element to boost the country's competitiveness. The IMTA promotes competency certification in the water sector in order to increase the competitiveness and quality of utilities in the provision of water services in Mexico.





Continuing education

"Educational modality that allows professional updating in a career or in a specific area; study for professional development; updated periodically in his field of knowledge ... "

<http://www.abiertayadistancia.sep.gob.mx>

Continuing education

Classroom training program, open to the public and aims training of human capital in the water sector through disseminating technological knowledge and experience of researchers IMTA.



Certified process in ISO 9001: 2008

www.imta.edu.mx

Preparation and develop of teaching in response to a specific request of interested parties, which can be developed either in Jiutepec training center or at the place designated for the courses.



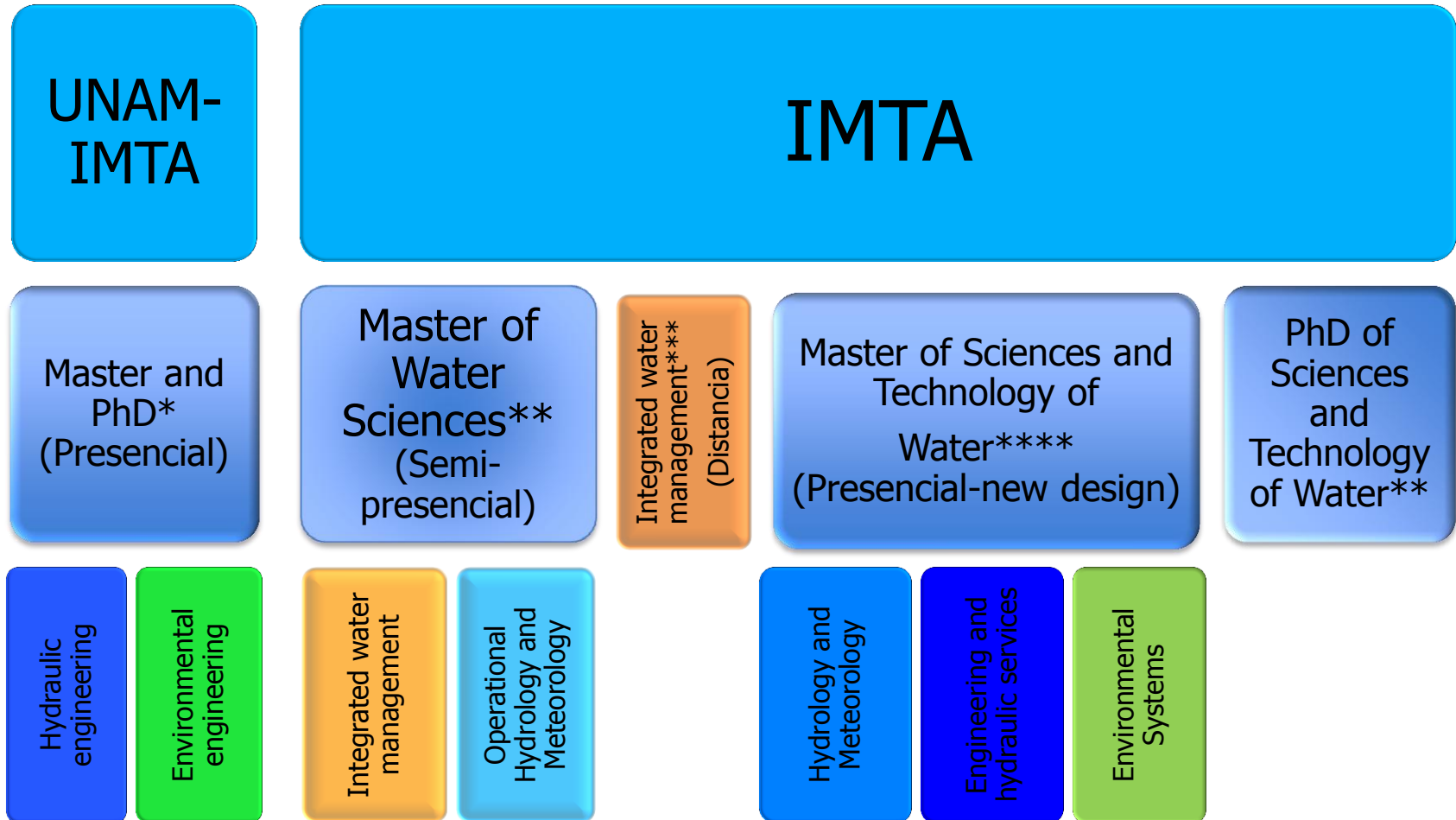
Postgraduate Programs IMTA



Train highly qualified human resources in research and technological development, with a integral and multidisciplinary knowledge, able to contribute to the sustainability of water resources and their associated natural resources.



Postgraduate Programs IMTA



- * Pertenece al PNP
- ** Fondo Sectorial CONAGUA-CONACYT
- *** Nueva creación, 2015
- **** Ofrece becas IMTA a partir del 2014



Posgrado **IMTA 2015** Convocatoria

EL INSTITUTO MEXICANO DE TECNOLOGÍA DEL AGUA
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	Maestría en Ingeniería Ambiental (Agua)		Doctorado en Ciencias y Tecnología del Agua	
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Conclusions

It is documented that countries where they invest more in education have greater long-term economic development, allowing say that education is an investment not an expense.

in this case, it is evident that provide services to supply drinking water and sanitation with **better human capital** will enable improved efficiencies, such as:

- ✓ Savings in corrective maintenance through better operation and proper preventive maintenance
- ✓ Savings in electricity through proper operation and maintenance
- ✓ Better service to the population, which can improve commercial efficiency, etc

It is necessary that the governments support financially training programs for human capital

At the same time, is required track and measurement the impact of **human capital formation** in order to determine the benefit of the actions taken, which hopefully will create the conditions for start of a ***virtuous cycle of investment and return***.



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THANK YOU