



Key finding from the OCED diagnostic of the Region

- ♦ The region is the second most populates (1.8 million). Half of it lives in the Great Concepción, and coastal areas. 18% of its inhabitants lives in rural areas (the largest rural population in Chile) with a 3% are indigenous people (mainly Mapuche).
- ◆ The Bio-Bio Region is the second most important region in Chile by its contribution to the national product, providing over 10% of GDP in 2004. The region is characterized by a "dual economy": on one side, there are big, productive firms (forestry and in the steel industry), and, on the other, awide array of small and medium-sized enterprises which represent 80% of employment.
- The growth of higher education capacity has enabled the region to support a four fold increase in enrolment between 1983 and 2007, from 21 000 to 94 000.



Although GDP per capita has increase 60% in the last 15 years, at national level, Bio-Bio is however one of the regions with the highest proportion of poor (20.7% versus 13.7%) and indigent (5.2% versus 3.2%) families (MIDEPLAN, 2006).

In this context the region face a triple Challenge

- How to promote new business formation?
- How to support the development of the existing SME base?
- How to address the hard core problems of poverty and inequity by creating opportunities for growth.





The OECD review has enhanced the role of the:

- Regional Agency for Innovation and Productive Development
- ◆ The Program for Competitiveness Improvement (PCI) Biobío Educating and Innovating is focused on promoting the development of the High Education, Science and Technology Cluster.
- In general, the review process has made us aware of:
 - urgent need of enhancing collaborative work between higher education institutions, economy and society stakeholders, regional and local government.
 - and it has provided the Region with a powerful tool for planning the routes for future, sustainable, development.





The recommendations of the OECD/World Bank Review include 4 areas:

- 1. Promote human capital development.
- 2. Promote regional innovation
- Enhance the contribution of HEIs to social, cultural and environmental development.
- 4. Build capacity for regional development.





Human Capital Development

- Higher education institutions and regional government should consider establishing a higher education coordinating body that would define goals, policies and priorities within the region.
- Higher education institutions should focus on the employability and entrepreneurial skills of graduates. reduce student dropout, reduce length of study programmes increase student mobility and opportunities for technical and working age studies.





2. Promote Regional Innovation

- Co-operation among private sector businesses, public administration, Regional Development Agency and HEIs should be expanded.
- Address the needs of local enterprises that are capable of exploiting research results
- Encourage local industry to diversify in activities in promising new fields
- Focus on sector-based cluster development in order to approach the small and medium sized enterprises (SMEs). reviewed to find ways of influencing to move from knowledge production to knowledge transfer and to perceive job creation as one of the goals of innovation





3. Enhance HEIs contribution to social, cultural and environmental development

- HEIs should engage in long-term community development (empower communities to find their own solutions to the challenges).
- ◆ The region should be seen as a "laboratory" for developing research in many different fields.
- A systematic exchange of information and experience should be put in place between higher education institutions facilitated by the regional government in order to bring greater efficiency





Build capacity for regional development

- ◆ Chile should continue and deepen the decentralization process and enhance capacity building in its regions.
- As regional capacities are built through "learning by doing", increased responsibilities at the regional level are necessary to build skills and develop problem solving approaches.
- The region should, in collaboration with the HEIs and other stakeholders, develop a strategy that sees arts and culture as an agent of development





What we are doing?

1. Human Capital

A Regional Development Corporation is been generated, lead by the Regional Government with the participation of HEIs and the main Companies present in Bio Bio.

World Entrepreneurship Forum: Chile, was carried out in Concepción

3. Enhance HEIs contribution to social, cultural and environmental development.

PMC Bíobioei: Urban Mapuche Community Support

Social Capital Measurement Project U. del Pasarrollo

2. Promote Regional Innovation

Smart City Seminary

Regional Innovation Strategy is been generated

Index of regional competitiveness

4. Build capacity for regional development

- Regional Innovation Strategy is been generated
- Project FIC Dec. 2010, U Bío Bío, UCSC, U FSM





Final Remarks

- Although the consequences of implementing most of the review recommendations are yet to be seen, the Region has witnessed an increasing number of collaborative projects among HEIs,
- a greater awareness for employability and entrepreneurial skills of graduates, for lifelong continuous education, technical and working age study opportunities, and for regional development.
- After the 8.8 earthquake on 27 February, 2010, HEIs have contributed to the recovery and progress of local communities across the Region.



