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Small and Large-scale irrigation and Drainage Investments

Recent experience in Perú and Bolivia

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SIWI 2016

Bolivia – Mi Riego (small scale)



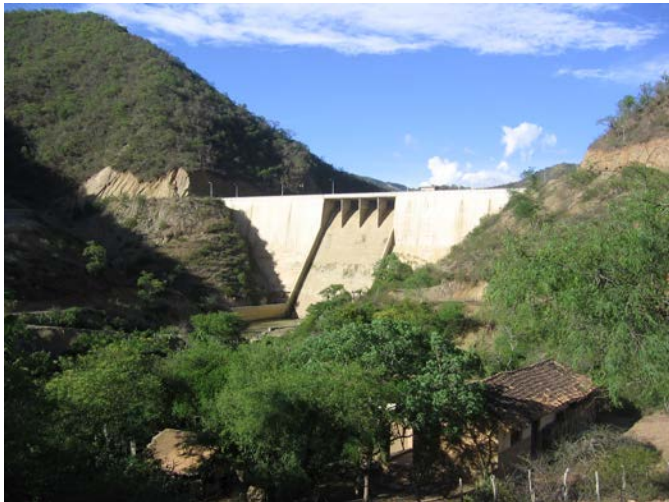
About Bolivia

- Most rural country in South America ~40% new rurality. Strong CC effects
- 10 million people, 8% below \$1.25/day (2012), < 5 MR 40 (2014), GDP US\$34 Bi (2014), 226,000 Ha (w/infra)
- Public Investments ~US\$ 130MM/year (2013-2015). Goal 40,000 Ha, 30,000 families in 5 years (valleys), regions with largest water deficit

Mi Riego Project

- Mi Riego US\$100MM bottom-up: lining canals, valves, gates, strong community/UA support, US\$300,000 for each of 337 municipalities. Investment through FPS (280 days project cycle)

Bolivia – Dams/Modernization



Dams Project

- US\$120 MM (2016)
- Build about 15 small dams, main conveyance system
- Dam Safety Component
- Water source management (Basin)
- Support UA/Regional Government to O&M infrastructure
- Engineering (pre investment, expert support, capacity building)
- Management, Supervision and Administration

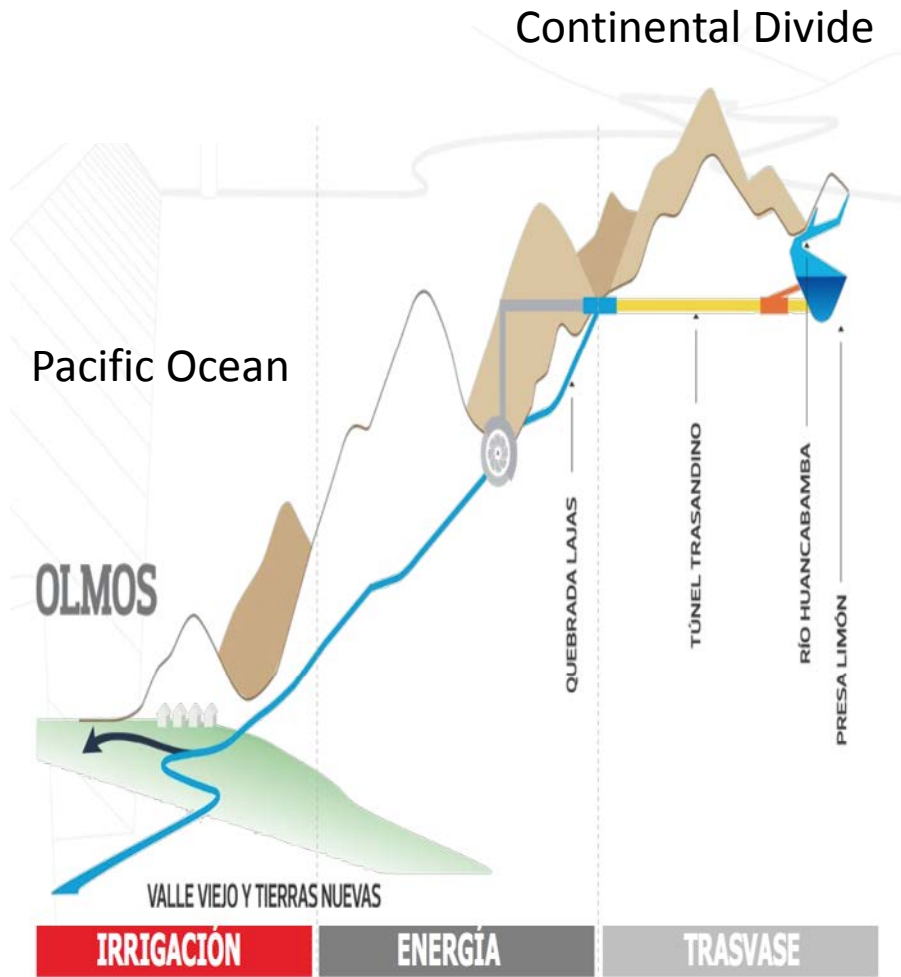
Peru – Project Olmos (large scale)

About Perú

- 31 million (2014), GDP US\$196 Bi, >5 MR 18, large water asymmetry, >200 mm coast >2000 mm rest, 1.2 MM Ha irrigation, 700,000 in the coast (ideal conditions to compete global markets, 1 MM UA, of which 50,000 larger than 50 Ha.
- Policy Decision to compete globally, trade agreements, logistic infrastructure, facilitate private investment PPP. New water law/institutions



Peru – Project Olmos (MPI concession)



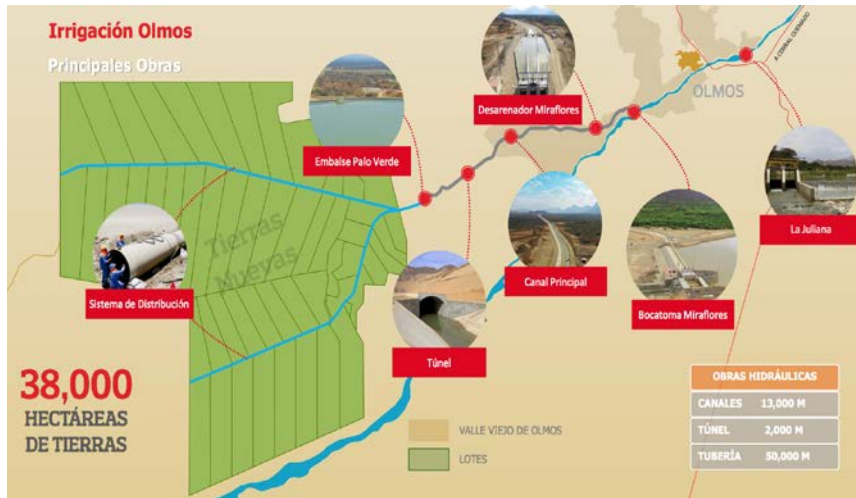
The Project

- Investments ~US\$.5 Bi since 2004 (under PPP law).
- CAF only IFI providing loans to private/public, and partial risk guarantees
- Two concessions: MPI (2004) BOOT 20 years; Irrigation (2010) 25 years
- Hydro component 2x300MW

MPI concession

- MPI Investment US\$244MM. 120MM (equity & bonds, CAF partial guarantee) 50MM CAF loan to Private; 70MM (non reimbursable fiscal support financed with CAF loan, already repaid)
- Pay or take 400Hm³/year by Regional Government at 7 US\$ cents/m³ (monthly)
- 70% indexed US, 30% Peru index
- Hydrologic/tunnel risks w/government

Peru – Project Olmos (Irrigation concession)



Irrigation concession

- 38000 Ha new and 5500 Ha old valleys
- Selling lots of 200-1000Ha at US\$3850/Ha (land 605, water right 3250)
- 9500 m³/Ha year pressurized guaranteed, electric power, take or pay US\$70/1000m³/year ~US\$665/Ha - year. Indexed
- May 2016 10000Ha u/production, 20000Ha u/preparation
- US\$258 MM Investment, 117 from selling land & water rights, 141 bonds and equity, CAF partial guarantee bonds

Avance Usuarios por empresas (1) | Mayo 2016

| Empresa | Cultivos | Has Sembradas |
|-----------------------|-------------------|---------------|
| AGROLMOS | Caña de azúcar | 8,106 |
| AGROVISION | Uva | 80 |
| | Arándano | 35 |
| AGROINDUSTRIAS AIB | Maracuyá | 80 |
| | Pimiento Piquillo | 20 |
| AGROINDUSTRIAL BETA | Palto | 25 |
| | Arándano | 70 |
| DANPER AGRÍCOLA OLMOS | Uva | 100 |
| ICCGSA AGROINDUSTRIAL | Palto | 57 |
| | Uva | 25 |

Fuente: Usuarios

Perú – Olmos Project

