Mining and development in the Andes: Argentina's regional lithium-GPN

Felix M. Dorn

universität innsbruck
Institut für Geographie

Hunger for lithium

Li-ion batteries play a key role in the context of a growing market for portable electronic devices, electric vehicles and renewable energy production.

In response to increased lithium demand for **battery applications**, in different parts of the world new mining projects are currently under development. Argentina, at present the world's second largest lithium exporter, possesses **24.1% of the world's resources** and shows highly dynamic growth rates.

In the so-called lithium triangle, lithium is extracted from salt brines. These peripheral areas of the Andean high plateau are characterized by low precipitation regimes and marginalized indigenous communities.

Figure 1: Identified world resources. Source: Own illustration based on USGS 2019.

Figure 2: Salar de Olaroz project, operated by Sales de Jujuy S.A. (Orocobre, Toyota Tsusho and JEMSE). Source: Own photo.

International capital and local participation?

The administration of mining resources is a matter of the federal provinces. Thus, concessions, investments and royalties are a great opportunity for the provincial governments to grow their fiscal resources and to create jobs. The operating projects are based on **international capitals**, royalties amount to 1-3%.

Local reactions differ between **resistance and cooperation**. While the communities in the Salinas Grandes basin protest against mining projects, the communities of the Olaroz basin collaborate with the mining companies. Their principal argument is **job opportunities**. With the help of microcredits, local contractor companies have been created that provide general services like cleaning, catering, etc.

Figure 3: Company structure at the example of Olaroz-Cauchari saltflat. Source: Own illustration.

Limited social inclusion

- Companies fill historic absence of the state and meet communities' basic needs
- Communities with limited negotiating power
- Real agreements based on indigenous right still non-existant

Figure 4: Does lithium mining help to improve life quality in my community? Source: Own empirical survey.