

From shelf to school

How better warehousing keeps classrooms supplied

School books and other learning materials only help students if they arrive on time and in good condition.

With support from the Swiss SECO-funded Subnational Public Finance Management programme, regional governments in Peru are modernising how educational materials are stored and delivered. Standardised protocols, digital tools and capacity building are turning warehouses from simple storage spaces into more efficient links in the education supply chain.

The result: more students – particularly in remote and vulnerable areas – receive the learning materials they need, when they need them and in good condition. This is helping to make access to education more equitable while making better use of public resources.



Inside the San Martín warehouse, where staff completed training and operational improvements. Source: Subnational PFM programme.



Closing gaps in school deliveries

In 2019, only 6.7 percent of rural primary schools received complete printed materials in good condition and on time. Better warehouse management addresses one of the main causes of these delays.



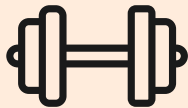
Standard protocols and better data

The programme introduced a Warehouse Management Protocol and digital georeferencing tools, helping regional governments assess warehouse conditions, identify problems and plan improvements based on evidence.



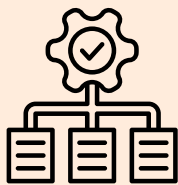
Space recovered and costs reduced

In San Martín, the work freed up around 1,080 m² of warehouse space and generated estimated annual savings of PEN 231,000 (USD 68,000) by reducing the need for rented storage.



Stronger regional capacity

Training, digital tools and clearer procedures are helping regional governments manage public resources more independently and support more reliable education services.



Influencing national practice

Evidence and tools developed in six regions have informed work by the Ministry of Economy and Finance, including similar warehouse management assessments elsewhere and changes to guidance on storage and inventories.

The challenge: getting educational materials to every school

When warehouses stocking school books and learning materials – and their inventories – are not properly managed, it can lead to losses, damage, unnecessary purchases, increased storage fees and delays in delivery to schools and their students. These problems affect rural and lower-income communities most severely, widening existing inequalities in education (World Bank, 2018; UNESCO, 2023).

In Peru, the Ministry of Education designs, produces and purchases materials for early years, primary and secondary education. It transports them to regional education bodies and local school districts, which must then store, organise and distribute them to individual schools. This final stage is especially difficult in remote Andean and Amazonian areas.

Official figures show the scale of the problem. In 2019, only 16.6 percent of primary schools received printed materials in sufficient quantities, in good condition and before the school year began. The figure was just 6.7 percent in rural areas. School districts report late deliveries, too few warehouse staff and inadequate storage space as major constraints.

The response: practical improvements to warehouse management

The Subnational PFM programme works with six regional governments and their local school districts. Its support covers the full warehouse process: receiving materials, organising and storing them, managing inventories and distributing them to schools.

The aim is simply to help materials arrive complete, undamaged and on time.

The programme combines several forms of support, following thorough assessments of the status quo:

- **Training for warehouse teams:** Practical training and technical assistance help logistics and warehouse staff improve day-to-day management.
- **Common procedures:** Standard protocols set clear steps for receiving, organising, storing, controlling, distributing and disposing of materials.
- **Reliable information:** Digital tools record warehouse conditions, identify operational gaps and track progress.
- **Warehouse-specific plans:** Diagnostics are translated into practical actions on layout, signage, security, working conditions, inventory control and use of space.

- **Better stock control:** Information systems improve records and make stored goods easier to trace.
- **Follow-through:** The programme monitors improvements and helps education and logistics teams work together across the supply chain.

Results: more orderly warehouses and better use of public resources

Regional governments and school districts now have clearer procedures for receiving, storing, recording and distributing educational materials. Staff training and standard protocols have improved inventory control and created better conditions for timely delivery to schools.

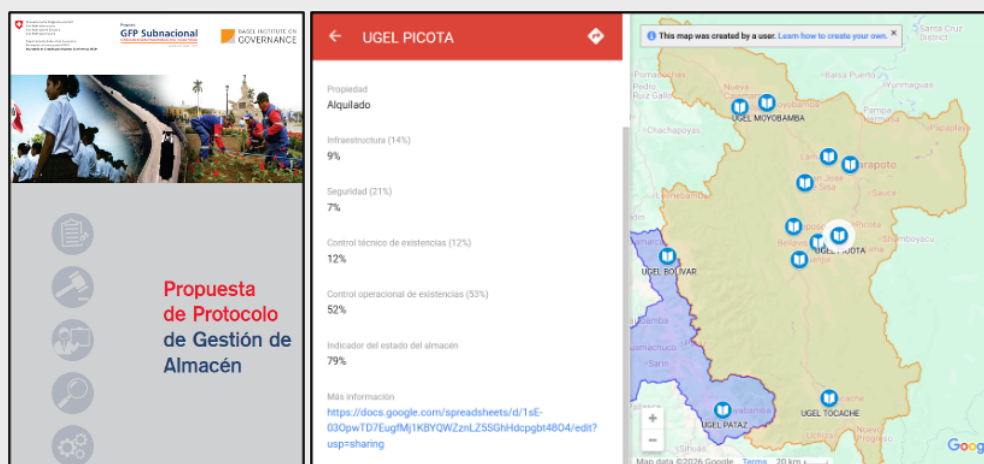
The programme has also helped warehouses use their existing space more effectively. Teams have reorganised storage and removed obsolete or unused materials. Digital tools make it easier to track stock, monitor warehouse conditions and base decisions on reliable information.

The work has influenced practice beyond the six participating regions. Diagnostics produced by the programme highlighted common gaps and prompted Peru's Ministry of Economy and Finance to carry out similar assessments elsewhere and refine national guidance on storage and inventories. The programme contributes evidence and practical tools, while the Ministry provides regulatory oversight, specialist training and support for wider adoption.

Case study – San Martín: recovering space and reducing costs

Since 2019, the programme has supported San Martín's regional government to assess and improve 10 education warehouses serving 3,301 public schools. More than four in five of these schools are in rural Amazonian areas.

The starting problems included disorganised storage, obsolete materials, weak inventory control and delays in distribution. The programme addressed this by promoting the use of a standard diagnostic protocol and a digital application to collect georeferenced information on each warehouse, which allowed it to diagnose the status of each site and build a clear basis for improvement plans.



The warehouse management protocol (left) and georeferenced data dashboard on the status of education warehouses in the San Martín region (centre and right). Source: Subnational PFM programme.

The programme then helped regional and local education teams prepare plans for each warehouse. Actions included reorganising and labelling spaces, improving security, strengthening inventory controls and training staff. Better use of Peru's administrative management system also improved the traceability of materials intended for around 265,000 students.

A concerted effort to remove obsolete and unused items recovered around 1,080 m² of warehouse space. This produced estimated annual savings of PEN 231,000 (USD 68,000) – around 1 percent of the region's 2023 budget for basic education goods and services –, mainly by reducing the need to rent additional premises. Assets worth more than PEN 1.8 million (USD 529,000) were properly organised and made available for use.



One of the warehouses – before and after the programme's interventions, showing visible improvements. Source: Subnational PFM programme.

Case study – Paucartambo: modernising storage space for remote and vulnerable schools

The Paucartambo school district in Cusco distributes materials to 329 schools and more than 13,000 students, many in remote communities. The province has a poverty rate of 46.9 percent, making reliable public education services particularly important.

With programme support, the school district assessed serious deficiencies affecting the proper storage and distribution of materials, and developed a comprehensive improvement plan. It now has a specialised warehouse with new infrastructure, better equipment and video surveillance. Materials can be stored more safely and managed more efficiently before being sent to schools.

The case shows how strengthening warehouse management can directly contribute to the effective delivery of educational services, particularly in hard-to-reach schools.



New warehouse in Paucartambo for school materials. Source: Subnational PFM programme.

Lessons learned: Improving education warehouses

Four lessons stand out from the programme's work with regional governments and school districts.

1

Start with a clear diagnosis. Reliable information on each warehouse helps teams identify the most serious gaps and prioritise affordable improvements with an immediate operational benefit.

2

Secure leadership and coordination. Progress is more likely to last when education managers, logistics teams and warehouse staff share responsibilities and regularly review implementation.

3

Fit digital tools into real processes. Dashboards and inventory systems add value when staff know how to use them and when they support clear procedures rather than operate as standalone technology.

4

Improve gradually, then expand. Testing tools in real warehouses, building staff skills and standardising what works makes wider adoption more practical.

Why this matters for development partners

This experience shows that education logistics can improve without relying only on expensive new infrastructure. Clear procedures, usable information and trained staff can recover space, cut avoidable costs and make warehouses more secure and reliable. Coordination with national authorities also creates a route for successful approaches to spread beyond the original regions.

For development partners, the key lesson is that strengthening the less visible parts of public administration can have a direct effect on whether children – hundreds of thousands in this case, many in rural areas – receive the materials they need to learn. It is a concrete investment in better use of public funds and more equitable education services.



Children in San Martín receiving their textbooks in time for the start of the school year. Source: Subnational PFM programme.

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About this publication

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