

Estimating International Construction Projects

What are the main differences between Estimating & Constructing a facility overseas vs. the USA? After 40+ years of compiling Capital Cost Estimates in the USA & in over 37 Overseas countries, I have listed below the main differences that an Estimator or Quantity Surveyor need to be aware of:

- 1. You must consider local policies, standards & work practices when working on international construction projects, country building regulations / building codes can on occasion be remarkably comparable to the USA codes, however many times they are completely different.
- A construction project that takes 12 months to build in the USA can take 15 to 20 months (or more in some overseas countries). This, of course, can impact the construction in-directs / preliminaries.
- 3. Productivity! No country can match USA construction productivity, some countries take 10% to more than 200% (or more) man-hours to accomplish the same construction activity than in the USA. Extreme weather conditions, remote locations & shortages of skilled workers can also impact construction productivity.
- 4. A skilled USA construction worker bill-out rate can be between \$80 & \$100 per hour vs. \$10 to \$15 an hour for the same skill in a less developed country.
- 5. Many countries experience high inflation / escalation rates compared to the USA. For example: both Argentina & Turkey are experiencing more than 50% annual inflation rates.
- 6. Some less developed countries rely on intensive labor utilization, because labor is readily available & inexpensive, rather than using construction equipment (backhoes, hoists, concrete pumps etc.), which are sometimes not available.
- 7. Possible disputes need to be resolved how is this issue handled? Arbitration? Is it spelled out in the contract?
- 8. Many overseas countries have less than adequate infrastructure, problems with road width & bridge / tunnel clearances or bridge weight limitations may need to be evaluated.
- 9. Country procurement statutes such as 75% of materials must be made in the local country (for example).
- 10. Intricate supply chains / logistics issues need to be considered such as tariffs. All documents / drawings & specifications need to be in both host country language & English. Managing the purchasing & delivery of complex production equipment, materials and the expediting effort can be extremely demanding.

- 11. Some countries lack skilled workers, for example a large refinery project we were involved with northern Africa needed to import 30 + Romanian welders because host country lacked this resource. Additional costs included a temporary camp and travel related costs.
- Unavailable and poorly maintained Construction Equipment (Cranes, bulldozers, trucks etc.) can be a major issue and in some cases are not available.
- **13.** Lack of hand tools / power tools utilization can be a problem that can impact productivity.
- **14.** Many countries lack consistent energy & electrical resources; some countries experience rolling blackouts on a daily basis for 2 to 6 hours per event.
- **15.** The construction workforce many times cannot read or write English or the host country's language.
- **16.** Many times, there is a shortage of experienced construction supervisors / foremen to direct the workforce.
- 17. From time to time, there are government rules / mandates directing the contractor to utilize a high percentage of local construction labor on a project.



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- 18. Language issues & the need for interpreters can be an added expense.
- 19. Quality issues: some local materials are not of the quality required, that might need substitutions that will increase the cost of the project.
- 20. Communication, telephone, internet, emails between the engineering & construction teams that might be based in different countries can present challenges that need to be optimized.
- 21. On remote sites requiring temporary camps (accommodation & food) and long travel distances is another issue to consider.
- 22. Culture / Religious issues, some countries take prayer break each day. Some Asian & Middle Eastern countries take more than 25 public holidays each year. In the EU, workers take a minimum of 4 weeks vacation each year.
- 23. Safety issues: some countries use minimal safety programs, hard hats, steel toe cap boots, googles are seldom used. Scaffolding in some countries consists of a timber / bamboo framework. Deep excavations many times lack the planking & strutting used in the USA & Europe.
- 24. Completion bonus: some work crews demand a completion bonus, it might be 1 or 2 weeks or more salary to complete the work.
- 25. Some countries decide to use less instrumentation / controls in order to provide work opportunities to their citizens.
- 26. The work week in some counties can be 50 or 60 hours a week. In the Middle East, Friday is their rest day.
- 27. Check current tax regulations that are in effect for: Imports, VAT / GTS, B&O tax & other local province / city taxes.
- 28. Dealing with legal, contractual, terms & conditions, payment issues in some overseas countries can be demanding, requiring the time & expense of experienced lawyers / solicitors
- 29. Be aware of what the standard contracts used in the overseas country are: FDIC, Owners' Contract or other. These terms & conditions can impact warranty, payment terms & insurance issues that can be significantly different to USA standard practices that can have a cost consequence.
- **30.** Some overseas projects are so remote that there is a need to purchase planes or helicopters. These aircraft require maintenance, re-fueling & the salaries of the pilots.

Of course, there are many other construction project specific issues that could have cost ϑ schedule ramifications, these are the ones I believe are the main issues.

Wrap Up

International construction can be a complex undertaking! Being aware of local rules, handling cultural customs, communicating across various time zones, good planning, a 1-week site visit by the Lead Estimator to proposed project (with the ability to take photographs / videos, involving local Engineers / Consultants can be a tremendous support in producing a comprehensive proposal / tender bid.

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Compass International has construction productivity data on 150 + countries. Our 2025 Global Construction Cost Database is now available and contains productivity information to assist the estimator in arriving at the best cost estimate.

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