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Slaughterhouse in Southeastern Afghanistan: A Public–Private Partnership

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Abstract

A contractor faces a decision whether to bid on becoming the private partner in a public–private partnership in the capital city of a southeastern province in Afghanistan. At stake is an investment in building an open-air slaughter facility and operating costs in return for 75% of generated revenues. The contractor works to develop a budget to estimate the economic viability of the operation. Factors encouraging risk analysis include estimates of daily animal slaughter numbers and the viability of and enforcement of a facility-use requirement to support use estimates. This teaching case is suitable for advanced undergraduate or graduate courses in business strategy examining the challenges faced by small-scale agribusinesses in an emerging economy. It is also appropriate for executive education considering foreign investment or management opportunities.

Keywords: slaughterhouse investment, decision case, small business, rural development, Afghanistan

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Introduction

Mohammad Aziz had to make a decision. He knew this sort of opportunity might not happen again. He reflected on the growing pressure throughout the province to find additional means to generate income as contracts offered by various government and non-government organizations began to dry up in Afghanistan. His own situation is particularly tenuous because of his near-term objective to expand his fledgling construction firm, Global Rock Construction Company, in order to accommodate the addition of his oldest son, Popal.

Mohammad thought back to his younger days when he and his siblings would follow their father to the grange (livestock market) on the hill in Qalat on top which rested a castle said to be built and used by Alexander the Great. His father, then a local butcher, would visit the grange several times a week to purchase sheep and an occasional cow. Mohammed would help his father slaughter livestock on a flattened area of the hillside just adjacent to the grange. This traditional location for slaughter by Qalat's butchers remains today, although an increasing number have begun butchering their livestock closer to their homes or shops due to pressure from the Afghan National Army, which occupies the castle on top of the hill, and some more powerful local residents.

Mohammad had to admit that open-air slaughtering on the hillside has a number of undesirable health, sanitation, and aesthetic impacts. But, like most municipalities in Afghanistan, Qalat lacks an operating slaughter facility. Further, there are no restrictions on animal slaughter and few, if any, incentives for butchers to change standard slaughtering techniques and locations.

The Region

Qalat is located in the interior of Zabul Province and serves as the capital city[1]. Zabul is located in south-eastern Afghanistan, and because it shares a border with Pakistan, it serves as an Afghan entry-point for insurgents. There are three NATO-occupied, forward operating bases in Qalat, one of which hosted the Zabul Provincial Reconstruction Team comprised of US soldiers and airmen, and representatives of US government agencies including USDA, USAID, and the Department of State until the withdraw of NATO forces in 2014[2]. The Afghan National Army occupies Alexander's castle, and there is an Afghan National Police unit based in Qalat. Highway One, the paved Afghan ring road, runs through Qalat. There are generally passable but non-paved roads throughout most districts in the province.

Approximately two-fifths of the province is covered by mountains, or semi-mountainous terrain and just over one-fourth of the province is flatland. Most of the land is considered shrub-land although areas benefiting from spring runoff from the mountains and where irrigation is possible are farmed. Both the Arghandab and Tarnak rivers run through the province, and there exist

[1] Information on Zabul Province and Qalat is sourced from the Naval Postgraduate School at https://my.nps.edu/web/ccs/zabul and from the knowledge of the author based on US military briefings and within province experience.
[2] At the time of the decision, the impending withdraw of NATO forces was a generally anticipated reality for Qalat.

many seasonal rivers and streams. Most of the populous, including that in Qalat, have ready access to potable water. The literacy rate is estimated at 1%.

The primary occupation of the province is agriculture. Predominant crops include wheat, corn, barley, almonds, grapes, apricots, potatoes, watermelon and poppy. Primary livestock consists of cattle, sheep, goats and chickens. Swine are not raised in the province as most occupants are Muslim. Many agricultural products are sold direct from the farm to traders. There are active markets in Qalat for commodities and food, and approximately three dozen butchers operate shops in town or out of their home compounds.

The Project

The leadership of RampUp South proposed the building and operation of a slaughter facility through a public-private partnership. This organization is an Afghan-run and Afghan-owned non-profit largely funded by USAID with the objectives of strengthening the resources and functioning of municipalities. In December, they held a pre-bid meeting for construction and operation of a slaughter facility.

In preparation for the pre-bid conference, representatives from USAID, Ramp-Up South, USDA and the Qalat mayor (hereafter called "the team") met to discuss building a slaughterhouse in Qalat. The consensus was that a slaughter-house should be built as a public–private partnership and that it should be co-located with the existing livestock market. The team also agreed that additional stakeholders, to include local butchers, traders, and the Director of Agriculture, Irrigation and Livestock (DAIL), need to be involved throughout the planning process. Subsequently, representatives from the team assessed current livestock marketing, slaughtering practices, locations, quantity and type of livestock moving through the market so they would have this information available for facility design and to provide to the contractors who would bid on the project.

The team visited butchers both in the Qalat market and on-site during the slaughter process to solicit input and assess practices and impacts. On the day they visited the butchers, they found them among approximately fifteen animals that had been killed awaiting butchering (all sheep and goats). The animals were being butchered on their hides, so the process itself appeared relatively sanitary, although there was no water source present for cleaning tools or other items. The general area was littered with offal; there was moderate fly pressure, and it had a slightly offensive odor. It was also apparent that the butchers had been leaving animal byproducts (largely offal) over many weeks in depressions they had dug near the site used for slaughter. When the butchers were asked why they did not clean up the offal, they replied that this was the mayor's responsibility. When visiting the site again two weeks later, the slaughter site was occupied by only two butchers, each of whom had killed a cow and were processing it on its hide. There was no offensive odor, and the site was relatively clean. One of the butchers indicated they regularly clean up the blood and other non-meat products when they can sell them for use as fertilizer.

During a follow-on shura (meeting) with nineteen local butchers, the team learned they had never used the existing open-air slaughter facility that had been previously built in town (Exhibit 1). The butchers said it was not necessary as their current slaughter practices and locations were adequate and that the location of the slaughter facility was far from both the livestock market, where they purchased animals and their shops, where they sold the meat. They did not oppose the idea of a slaughter facility, however, if it were advantageous to them and did not pose substantial cost for use. From the discussion with the butchers, three criteria emerged and were determined essential for a facility: a) located close to town and their shops; b) the slaughter facility and market should be co-located or reasonably close; and, c) with traders in mind, the market plan should include overnight facilities for livestock. In general, by the end of the meeting, butchers were supportive, and thirty-six butchers signed an agreement to use such a facility if it met their criteria.

The team also visited livestock traders onsite at the market prior to the conference. Traders concurred that the market should be co-located with the slaughter facility and have overnight facilities. They added the market would need running water and walls, and perhaps a facility for individuals traveling with livestock (e.g., hotel). Persons interviewed by the team included local traders, those traveling from other districts in the province, and traders from two of the nomadic (Kuchi) tribes. The general consensus was that the tentative location chosen for the slaughter facility, the land on the opposite side of the hill from the current market, would well accommodate the grange—located adjacently to the slaughter facility. It was a convenient location just off the main road and sufficiently close to town. It had an important asset; the hill would act as a visual and distance barrier between the facilities and the capital city of Qalat.

Exhibit 1. One butcher shares his thoughts about the location of the new facility.

Pre-Bid Conference

As soon as the contractors settled, officials from RampUp South, flanked by local government, non-government and military partners, outlined their overall objective to be a fully-functioning single site. It would be an inspected slaughter facility with an adjacent livestock holding facility and market. Both were to be operated in a sustainable manner without external funding once initial construction was complete. They were working with NATO and non-government organizations to obtain funding for the livestock market. The purpose of the conference was to facilitate securing a private investor to build the slaughter facility and act as the private entity for operation in what would be a public–private partnership—one of the first in Qalat. Once they had gained input from the contractor firms, they intended to work with local officials, butchers, and livestock traders to solidify the location for the slaughter facility and market. Even though it was apparent—the plan had been in the works for several weeks if not longer—this was the first time Mohammad and the other contractors had heard about the plan.

Bismillah, the Chief Operating Officer for RampUp South, said: “One successful bidder will assist our team in designing the slaughter facility and then after completing construction, will be responsible for operating and maintaining it for five years.”

The intensity with which he shared his vision drew the audience in and created a level of excitement Mohammed thought to be in stark contrast to the usual meetings of disgruntled residents that seem to fill the town hall. Bismillah explained that the US military’s Agribusiness

Development Team, working alongside the Provincial Reconstruction Team (PRT), had been working with local government and businessmen like himself for almost three years. They were seeking secure funding for what would be an adjacently located grange. He was hopeful this funding would be forthcoming, but said the slaughter facility would be built regardless of whether the grange could be moved to an adjacent location or if it stayed as an open-air market on the opposite side of the hill.

Plan of Action

Mohammed returned home and immediately started putting together a bid that matched the initial plans for an "open-air facility with a non-porous, easily cleaned slaughter-floor and running water" as outlined at the meeting (Exhibit 2). He included "two non-meat animal waste holding areas with concrete flooring and sides" that were a required part of the design so as to reduce potential groundwater contamination, varmints, and insects. Mohammed smiled as he realized that these waste-holding areas would allow him to capture additional value of slaughter that was now widely wasted in the process.

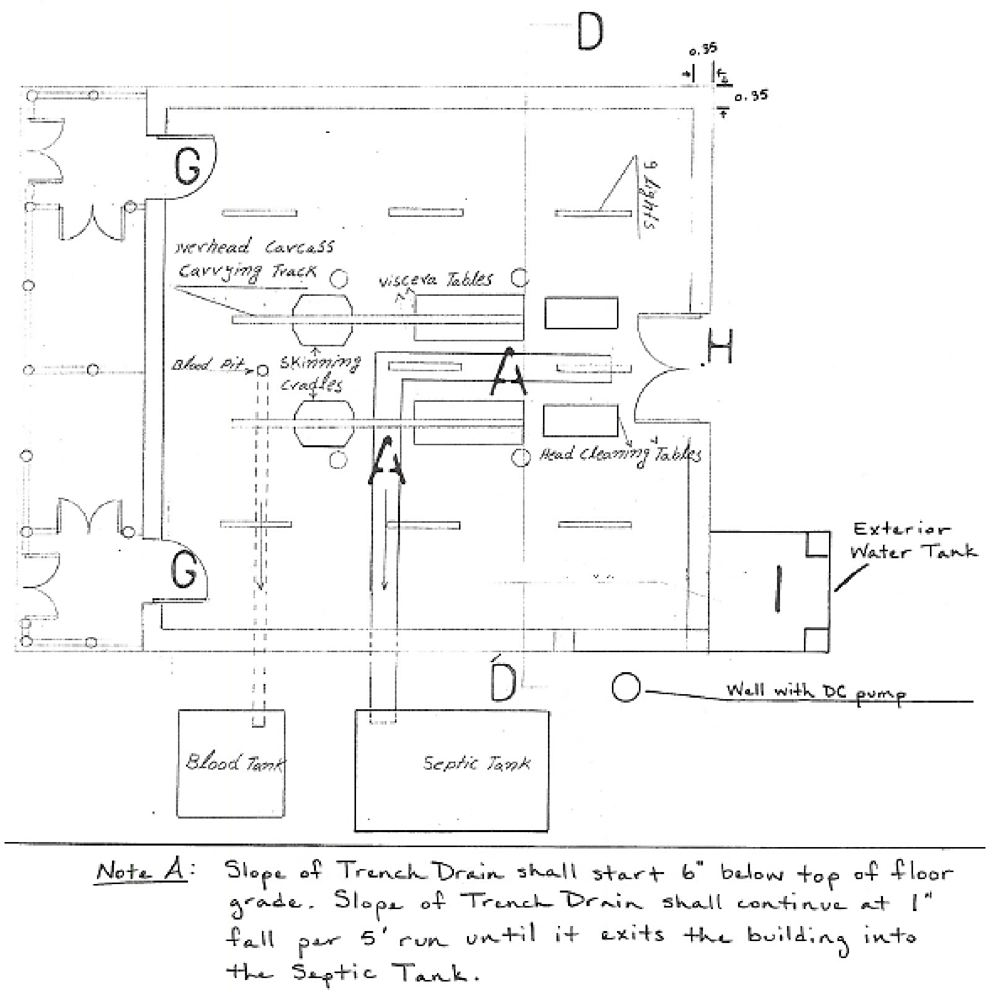

Exhibit 2. Initial draft of slaughter facility plan

While the intent was to establish rules associated with the slaughter, dressing, and meat handling, including controls to governing the operation of the facility, it was not part of the bidding process. Mohammed felt fairly comfortable in his assumption that there would not be many changes from what currently occurred on the hillside.

However, an important question on the minds of the potential bidders at the conference had been how the mayor intended to make sure butchers would use the facility at a cost, given that they were currently using the public hillside.

In what impressed him as a previously developed answer in case the question arose, Bismillah told the audience that "an enforcement mechanism or appropriate incentives would be implemented to ensure full use of the facilities" and that "government guarantees of enforcement of associated rules would be obtained prior to the beginning of facility construction."

The RampUp South team reinforced their statement by reminding the bidders that it was a public –private venture and local government had a significant stake in the outcome. They would provide the land and in return receive 25% of net slaughter revenues (revenue less direct cost of slaughter)—not an insignificant sum, especially important as revenue streams were down as aligned with the withdrawal of NATO troops.

One bidder pointed out that it was the private partner that would build the facility and pay all the operating and maintenance costs. If the slaughterhouse was not used to the degree anticipated, it would be difficult to recoup their initial investment. At that point, the Mayor stepped forward and outlined their tentative plan to enforce the use of the facility.

The Mayor explained the tentative plan enforcing the slaughterhouse use included requiring butchers to be registered and requiring meat sold in Qalat to have a stamp offered only to meat slaughtered at the slaughterhouse. The presenter also indicated they planned to fine or suspend the business license of those not complying. The team appeared very confident that the system put in place would be effective. Further, Mohammed thought, "If I accept the contract as the private member of the partnership, I personally will be motivated to work to ensure enforcement of the use of the facility." While most of his competitors were of the mindset that it was the government's job to make sure everyone played by the rules, he knew he would need to come up with an alternative plan if corruption, lack of resources, or any other potential factor did not result in a slaughter-house requirement for butchers being strictly enforced.

He specifically wondered how hesitant livestock buyers would be to use the slaughterhouse at a cost. He knew its use would require further costs associated with transportation as butchers often hired rickshaws to move the meat to their shops in town—a distance that would increase with the new slaughter location. The cost would be less and the rule easier to enforce if the grange was co-located with the slaughterhouse, but he knew that plan might never be realized.

Budget

Mohammad sat down with his son after the meeting to pencil out some of the financial estimates. His son had come up with a nice schematic of what the finished facility would look like to include in their proposal (Exhibit 3). Mohammed knew he could construct the facility for approximately 1,400,000 Afghanis ($20,000 USD), and perhaps much less if he did not include the cost of his labor and that of his other family members. He thought this bid might be a little high, but he believed it would be a good number to use as that is what he would charge the NATO organizations if they had contracted him to build the facility; He figured his fellow contractors would be thinking along the same lines. He had nearly that much in savings from previous NATO-sponsored projects he had completed during the past decade.

His estimate included the facility and also a 120 meter deep 8-inch diameter well and a submersible pump. He expected he would need to drill at least one more well and perhaps purchase two additional pumps over the next five years. These costs he included in the annual operating costs.

After just a moment's thought, Mohammed decided he didn't expect the facility to last much beyond the five-year contract, and he certainly did not intend to put in much additional money for upkeep to extend its life. "I can't think much beyond the next five years in this unstable environment," he thought.

Mohammed assigned an operating cost of 1050 Afghanis ($15 USD) per day for basic repairs and to cover other costs associated with being open regardless of the level of facility use. He figured in an annual cost of 140,000 Afghanis ($2,000) for the combined salary of himself and his son.

His thoughts shifted to the revenue side. While the butchers would be a captive audience if the rules were enforced, he knew they would eventually move their slaughter to their homes or otherwise work to circumvent the use of the slaughterhouse. He decided he could charge 50 Afghanis for slaughter averaged over the number of sheep and cows (weighted based on his expectation of one cow for every four sheep slaughtered) and that his average cost associated with the slaughter would be 20 Afghanis[3]. He also figured he could get about 10 Afghanis for the non-meat components of each cow slaughtered and about four Afghanis for sheep. He thought it was better to ignore this potential source of revenue for now because he wasn't sure of his right to these byproducts and whether there would be a sufficient market given the quantity of slaughter he anticipated. He recalled that he would have to provide 25% of the revenues to the city.

[3] Note an exchange rate of 70 Afghanis to $1 USD is used.

Exhibit 3. A pictorial depiction of the draft slaughter facility when completed.

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Mohammed had his son sit down and work out the calculations, asking him to tell him the number of animals that would need to be slaughtered each day in order to cover his investment cost and pay his operating costs and their salaries.

[4] Note an exchange rate of 70 Afghanis to $1 USD is used.

Livestock Numbers

As his son worked the budget, Mohammed looked over the tally of livestock numbers provided by RampUp South at the pre-bid meeting. They had conducted animal counts on five different days over a one-month-period.

He knew he might need to adjust the numbers. First, they were taken in March. Typically, the number of animals sold increases later in the spring and over the summer. He did, however, think livestock numbers in March might be a good estimate of livestock numbers averaged over the entire year because there tended to be fewer livestock sold during the winter months. Second, he knew the team only counted the number of animals in the market and did not attempt to estimate the number sold for slaughter. Mohammed figured about half the animals were from out of town, and that those traders usually sell their animals within one or two days so they can return home. The other half he estimated to be local, and his experience suggested one-third of the animals they brought along to market would be sold on any given day.

Day	Time	Number of head
Sunday	11:30 to 13:00	275 sheep and 80 cattle
Tuesday	09:00 to 11:00	155 sheep and 30 cattle
Wednesday	10:00 to 12:00	317 sheep and 57 cattle
Thursday	08:00 to 09:30	477 sheep and 82 cattle
Saturday	09:00 to 10:30	306 sheep and 45 cattle

Exhibit 4. Sample number of livestock observed at the grange in one day during a one-month-period in March.

The Decision

Mohammed felt he had all the information he was able to collect or estimate, even if it was not all the information he would like to have to make his decision. He began to go through the budget, first with straight analytics. He would have many factors to consider and ponder over the next couple of days before he decided whether this was the right path for him and his family.

1. Identify the different groups of participants in this case and define what motivates them (to include financial interests). Do the interests of the different groups align? How do they conflict? How are these relationships likely to contribute to or detract from the success of the venture?

2. Identify appropriate policy options to meet the goal of associated with the end-state of butchers using the less convenient private–public slaughterhouse for a fee as compared to the current state of butchering without cost on public land near their shops. What additional costs do they impose on market participants and how might that affect their likelihood of use?
3. What is the break-even number of livestock that must be slaughtered on an average day for the venture? What assumptions did you make to calculate this number?
4. What is the anticipated number of animals that will be slaughtered each day? On what information did you base this estimate?
5. Identify the financial risks associated with adverse changes in policy or the market. While your consideration may be largely qualitative, provide quantitative estimates where possible or specify what additional information you would need to do so.
6. Would you recommend investing in the facility? Should you invest in the facility? Justify your response.
7. Is there any negotiation that, if effective, would change (the strength of) your response to the above question?