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War Game 1 Reflection

As the culmination of “Climate Hazards and Resilient Cities and Coastlines,” my class participated in a war game. The war game was a US think tank simulation of potential negotiations between five Indian sectors: water, agriculture, industry, healthcare, and energy. I served as the technological leader of the healthcare team. Throughout the day, the emotion in the room intensified from calm and respectful to a yelling match where whoever’s voice was loudest was the voice everyone heard.

In preparation for the war game, we synthesized the information we had learned in guest lectures, modules, and our outside research into a presentation outlining the major issues that we as the healthcare team wanted addressed. Corinne, our first presenter, made the majority of the presentation with help from the others on the team.

At the opening of the war game, my team presented four major issues surrounding the Indian healthcare system and how they will be affected by climate change. We stressed the terrible air quality of many urban centers in India—Delhi has the dirtiest air of any city in the world—and the importance of providing access to potable water for the millions of Indians who lack this necessity. Water-borne and vector-borne diseases such as cholera and malaria are prevalent in India. With larger floods in some areas, the instances of water-borne diseases will rise. As temperatures in India rise, mosquitoes that carry malaria will be able to survive at higher altitudes, exposing millions of Indians to the disease. Some Indians have developed an immunity to malaria, a genetic modification related to sickle cell anemia, but none have this immunity in areas where malaria-carrying mosquitoes do not currently live. The chance of an epidemic in India rises as climate change continues. We finished our presentation by discussing the shortcomings of healthcare infrastructure in India. 70% of Indians live in rural or semi-urban areas, yet 80% of the country’s hospitals are in cities.

No one in my class had ever participated in a war game before, so we were not sure how the day would progress. After each sector’s presentation, there was a question-and-answer session. My team received a few difficult questions but were able to avoid answering them outright. Each team attempted to find holes in others’ presentations, but tensions overall were still low. Most students in observing sectors participated in the question-and-answer session and almost everyone on each team answered a question.

My team discussed our strategy over lunch, preparing for the upcoming negotiations with other sectors. We first met with the industry sector. They were interested in cooperating with us, but only if we could prove that businesses would make a profit. We were able to convince the industry sector that educating Indian farmers about efficient agriculture and irrigation methods was in all teams’ best interest. Educating agricultural workers about environmentally friendly irrigation methods such as drip irrigation and teaching them about modern farming techniques would reduce water consumption and increase food production. Both of these results would help to bolster the health of rural populations in India. We also discussed the creation of health centers in semi-urban areas and eventually rural areas. We modeled our idea off of Vaatsalya, a semi-urban clinic that offers cheaper care than a standard hospital in a city.

Vaatsalya is able to turn a profit because it treats a huge number of patients per day and has low monthly rent, as it is located in a much smaller building than an average urban care center. Eventually, these care centers would expand to locations in more rural areas; when they are no longer profitable, another solution for rural healthcare would be discussed.

The negotiation with the industry team was confusing because healthcare itself is an industry. During the negotiation, my team pondered with all present the following question: “are we representing the government’s interest in healthcare, the healthcare industry, or a combination of the two?” When preparing for the war game, this quandary did not appear. It was only when we met with a sector that directly overlapped with our own that confusion about our role arose. We decided that the healthcare sector was to represent more of the government and public interest in healthcare rather than the healthcare industry. With this distinction in mind, we then met with the water and agriculture sectors.

Healthcare, water, and agriculture agreed quickly that educating rural farmers about water conservation techniques and modern practices that increase crop yield was a necessary step to combat the increasing variability of the summer monsoon due to climate change. This negotiation was straightforward compared to our negotiation with industry. Each team had goals compatible with one another; we all wanted rural populations to have access to clean water and knew that education was the best way to achieve this outcome. A government-funded drip irrigation program was started many years ago. Under this program, the Indian government subsidized up to 90% or 100% of the cost of installing drip irrigation on poor farmers’ plots. This well-intentioned program failed because farmers had virtually no money invested in their drip irrigation systems and thus did not perform proper maintenance and upkeep. Many were simply clogged with debris and never fixed. We knew that an important part of our solution was to have farmers pay for their irrigation systems, as they would then be more likely to keep them working properly and thus they would continue to conserve water. We did not discuss specifically how this education would be funded, except that the government would contribute the initial capital to get the project started.

The evening session began with each team presenting its proposed solutions to adaptation and mitigation. These suggestions were more specific than any potential options discussed during the morning session, as teams had had time to negotiate with other sectors and talk amongst themselves to solidify their ideas. My team proposed to all teams what we had discussed in our negotiations, namely the creation of clinics in semi-urban areas and agricultural education for rural farmers.

After each team had presented quickly, we began the painstaking process of replaying each team’s most recent presentation and debating each of the points. There was much contention over the validity of specific proposed solutions. Many points needed clarifying questions. We spent a long time debating whether India should give electricity to Bangladesh in exchange for natural gas. My team opposed this idea because some places in India lack power already—India should not sell a commodity which all its citizens do not have access to. This power-gas trade also increases reliance on other countries and dependence on non-renewable sources of energy. For both of these reasons, my team opposed this relationship with Bangladesh. During this discussion and many others similar to it, emotions grew hot between the teams. The war game turned into a mix of yelling, shushing, rational argument, and more yelling. This cycle continued for at least an hour.

The intensity of the war game peaked when the document containing the recommendations to be sent to the prime minister of India was drafted. One member of the

water team exclaimed, “The water team just realized that none of our policy recommendations are in the list of solutions.” Some lighthearted laughter ensued, then the water team member continued, “We are the only team that has been cooperating with anybody else all day.” the water team declared that it was going to pull its support from any policy that the industry team had suggested, as they were the most difficult for the water team to cooperate with when negotiating throughout the day. I could not help myself from laughing at the ridiculousness of the statement. Every team was outraged at this broad insult; all the teams undertook difficult cooperation throughout the negotiation session and the debate.

The water team agreed to re-lend its support to the industry sector if a clause was added to the recommendation list stipulated the enforcement of the 2012 Water Policy. This policy, passed in 2012 but poorly enforced, calls for management of pollution and waste along with requirements for the pricing of water in rural and urban areas. A heated debate followed. None of the other teams knew what the 2012 Water Policy mandated, so we were debating about a mysterious document whose contents were unknown to all except the water team. Eventually, Professor Mujumder stepped in and gave us a brief synopsis of the policy, which from that point onwards we considered the complete 2012 Water Policy for the purposes of the war game. Eventually the industry sector agreed to the enforcement of this policy subject to approval once exact emissions standards were set. The war game concluded with a sigh of relief from all involved.

Overall, the war game provided some interesting insight into how real negotiations happen. I have never been part of any debate or model UN team, so this type of structured open debate was new to me. I have always imagined that real negotiators are civil and do not yell at one another across the room, but after this war game I have revised this misconception. I now imagine that the shouting and inter-sector whispering are commonplace, more intense depending on the stakes at hand.

In preparation for the war game, I was unsure how much I needed to research to have an adequate understanding of each team’s topic. My information about healthcare came from guest lectures along with some group research, and my knowledge about other sectors came from guest lectures and modules. Were I a professional negotiator in the fictitious US think tank, I would have prepared much more thoroughly for the war game itself. I also would have had a lot more time to research about my assigned position and would have had more background knowledge about India. As it happened, I had enough knowledge of the topics to feel comfortable arguing my points to the group and suggesting policies during negotiations.

The divisions of the sectors were often overlapping, so sometimes it was hard to know which part of the sector a team was to represent. For example, the industry sector includes the healthcare industry; the healthcare team was confused about whether to represent the healthcare industry, the government’s view of healthcare, or both. The energy sector had similar confusion about whether to represent the energy industry or a government bureau. These roles were clarified by talking to other teams during negotiations and also by asking questions of Professor Ganguly during the war game.

The roles within teams were clearly defined prior to the war game, but these positions deteriorated in the second half of the day. The morning presenter presented and the negotiator was the leading voice when making deals with other teams. The afternoon presenter had only a couple slides to present, a role much smaller in scope than the morning presenter. As tech leader, I imagined myself seated next to our debater as the teams sat in a ten-person circle, with each tech leader sitting next to his respective debater. As our debater spoke, I would look up

pertinent facts and show them to him; he would then use these facts in his arguments and discussion. In reality, there was no moving of chairs into a circular formation. Secondly, I was not able to connect to the spotty Wi-Fi in the war game room, so I could not look up any additional facts. I ended up talking and debating as much as my team's debater. I felt that I needed to speak up during the debate because otherwise it might have appeared that I did not do any research and was choosing not to participate in the war game. I did not want my grade to suffer because I was assigned a quiet role, so I chose to break away from my defined role and spoke up in the debate.

Finally, the students participating in the war game, myself included, had no sense of the economics of the issues we were suggesting and debating. I have never taken an economics class and I know virtually nothing of the budget of the Indian government. I do not know how much money it receives through taxes and what percentage of this money is spent each year on upkeep of roads, rails, and other public property. Our final list of policy recommendations could have cost ten million dollars, ten billion dollars, or more; it made no difference to us as we debated. In a real war game finances would play a large role in the negotiations and decisions made. There was not enough time for the class to learn all about India's finances. Despite this lack of important knowledge, we made our policy recommendations as specific as possible. To make the recommendations more specific would have been increasingly difficult because the next level of specificity would include money and timing, neither of which we as a class fully understand. By the end of our evening session—during the yelling match—Professor Ganguly observed, “Now imagine this intensity until three in the morning. That's what a real negotiation is like.” Though we as a class lacked financial background knowledge about India, we succeeded in having a realistic mock war game.