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## HEMP: TOWARD HUMAN SECURITY THROUGH SUSTAINABLE DEVELOPMENT?

Maj T.J. Titus

### JCSP 40

#### *Exercise Solo Flight*

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EXERCISE *SOLO FLIGHT* – EXERCICE *SOLO FLIGHT*

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Word Count: 3274

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## **HEMP: TOWARD HUMAN SECURITY THROUGH SUSTAINABLE DEVELOPMENT?**

What is security? Security means different things to different people or groups. Security studies emerged as an explicit study at the end of World War Two; it was primarily concerned with how nations could secure themselves against their aggressors in the context of the bi-polar Cold War. With the end of the Cold War, the paradigm of security studies began to expand from the traditional view of security as a strictly state concern, viewed through a realist or liberal lens. Security issues began to be examined in a broader context, posited on the notion that the world is what we make of it and encapsulated in a constructivist approach to security. In that context, the discussion began to take place of people as actors to be secured and developed; this has led to the development of the concepts of sustainable development and human security.

Sustainable development is an interesting idea. Its tenets are espoused in a wide variety of sectors and occupations, ranging from business and entrepreneurship, to engineering, and most notably as a paradigm within the study and practice of international development. In the context of sustainable development, I will demonstrate that the cultivation and processing of industrial hemp offers substantial potential as a way to improve human security. This paper will examine the linkage between the concept of human security as outlined in the 1994 United Nations Development Program *Human Development Report* and the Human Security concept. It will identify how the establishment of a home grown hemp industry can be a model for sustainable development and satisfy the key criteria of both sustainable development and human security.

Defining security is a difficult task, as it is a contested concept.<sup>1</sup> This is due to the variations in philosophical/theoretical approach to the analysis/formation and practice of foreign policy and international relations.<sup>2</sup> One thing that is common no matter the approach or how it is expressed is the basic idea that security is the state achieved when a person, group, nation or the international collective is free from threat.<sup>3</sup> Since the definition of security is truly only relevant in the context of your approach to international relations, it is useful to survey some of the prevailing approaches to the analysis of international relations: Realism, Liberalism, and more contemporary schools of thought such as Constructivism and Human Security.

## **Realism**

*Realism* is a high-level theory of international relations and is generally accepted as the dominant theory of international politics.<sup>4</sup> Interestingly, realism is not a singular, uniform theory. Rather, it is a family of related thoughts that fall within a continuum of views founded on the notion that the international system is inherently anarchic and characterized by competing national interests.<sup>5</sup> This world view is heavily influenced by the work of Thomas Hobbes on the *State of Nature*.<sup>6</sup> Realists can be divided into two

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<sup>1</sup> Robert Cox, "Social Forces, States and World Orders: Beyond International Relations Theory," *Millennium. Journal of International Relations* 10, no. 2: 126-155 Cited in Pauline Kerr "Human Security," in Alan Collins, *Contemporary Security Studies Third Edition*. (Toronto: Oxford University Press 2013), 104.

<sup>2</sup> Robert Cox is a well-known sponsor of this line of thought and discusses it in Robert Cox, "Social Forces, States and World Orders: Beyond International Relations Theory," *Millennium. Journal of International Relations* 10, no. 2: 126-155.

<sup>3</sup> Alan Collins, *Contemporary Security Studies Third Edition*. Toronto: Oxford University Press 2013: 3.

<sup>4</sup> Charles Glaser, "Realism," in Alan Collins, *Contemporary Security Studies Third Edition*. Toronto: Oxford University Press 2013: 16.

<sup>5</sup> Emily Trip, "Realism: The Dominion of Security Studies," Last accessed 26 May 2015, <http://www.e-ir.info/2013/06/14/realism-the-domination-of-security-studies/>

<sup>6</sup> Marc David Turetzky, "Understanding IR Theories 1: Liberalism V. Realism," last accessed on 26 May 2015, <http://hgh.gavilan.edu/mturetzky/pols4/TheoreticalPerspectivesLiberalismRealism.htm>.

main camps: *structural* and *motivational* realists. The key underpinning of *structural* realist thought is that the behavior of states is motivated by the lack of an overarching system of international governance. In this state of anarchy, states will seek security in maintaining their existing state of affairs.<sup>7</sup> *Motivational* realists on the other hand explain the actions of states which seek to expand in an effort to ensure their security. This aspect of realist thought varies from the structural realist approach; here, states take actions to maintain security, not because of the international system, but because they are motivated by internal factors. Regardless of the factions within the family of realism, there are a number of key tenets or lines of thought that remain consistent and they exist primarily in terms of the State, within the context of the military jurisdiction.<sup>8</sup>

## **Liberalism**

*Liberalism* adopts a much more optimistic view of people, institutions and states when compared to the realist approach. Its foundations can be traced back to the work of Locke and Kant, influential thinkers during the enlightenment period.<sup>9</sup> The liberalist approach to International relations (and subsequently security) was championed by US President Woodrow Wilson in the immediate post-World War One era and has made a significant resurgence in the post-Cold War era.<sup>10</sup> In the liberalist approach, state actions are not influenced by the exterior world, but rather by internal issues, politics and needs. Threats to security in this tradition are characterized as against belief structures, values and institutions. In that sense, security is the absence of threats against the *things* that a

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<sup>7</sup> Glasser: 15.

<sup>8</sup> Sarah Tarry, "Deepening' and 'Widening': An Analysis of Security Definitions in the 1990s," *Journal of Military and Strategic Studies, North America*, 2, Oct. 2009. Last accessed 26 May 2015. <http://jmss.synergiesprairies.ca/jmss/index.php/jmss/article/view/272>.

<sup>9</sup> Patrick Morgan, "Liberalism," in Alan Collins, *Contemporary Security Studies* Third Edition. Toronto: Oxford University Press 2013: 28.

<sup>10</sup> Morgan: 26.

society cherishes.<sup>11</sup> Liberalism is characterized by a tendency towards globalization across all sectors. This impacts global economics and politics. The liberalist agenda desires the achievement of international peace and security through cooperation among states. It is first and foremost not a theory and does not have a large body of theoretical underpinnings. Liberalism is primarily a practice, a way in which states and statesmen conduct themselves on the international stage. This is often held up by critics of liberalism as a key flaw.<sup>12</sup>

### **Constructivism**

*Constructivism* as it relates to international relations and security was a term first coined by Nicholas Onuf in 1989.<sup>13</sup> The concept emerged as a challenge to the negative view of realism and its foundation, or the idea that states exist in an anarchic international system. Constructivism suggests that states live in a *world of their own making*; it draws heavily on sociology.<sup>14</sup> At its heart, constructivism is based on three main thoughts:

1. Ideas have primacy: This is the polar opposite of realist theory where the primacy of the state is fundamental to IR theory. This concept is somewhat anathema in Liberal IR theory as well, in that the state is still the object to be secured;<sup>15</sup>
2. Identity matters: How actors we view themselves influences their actions. Therefore, if we understand an actor's identity we can divine what is important to them and thus predict or understand their actions;<sup>16</sup>

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<sup>11</sup> Callum Rogers, "What Role Does Liberalism Play Within Security Studies," last accessed 26 May 2015, <http://www.slideshare.net/CalumRogers/what-role-does-liberalism-play-within-security-studies>.

<sup>12</sup> See Andrew Moravcsik, "Taking Preferences Seriously: A Liberal Theory of International Politics," *International Organization* 51 no. 4: 514-515.

<sup>13</sup> Maysam Behraves, "Constructivism: An Introduction," last accessed 27 May 2015, <http://www.e-ir.info/2011/02/03/constructivism-an-introduction/>.

<sup>14</sup> *Ibid.*

<sup>15</sup> Christine Agius, "Social Constructivism," in Alan Collins, *Contemporary Security Studies* Third Edition. Toronto: Oxford University Press 2013: 92-93.

<sup>16</sup> Agius: 91-92.

3. Human relations are social: This understanding embraces the idea that humans shape the world around them and are influenced by the world they find themselves in.<sup>17</sup>

These three points can be summed up as a counterpoint to realist thought in sense that if the world is an anarchic system, it is because we believe it is that way (idea); because we believe we live in a state of anarchy, we react to that world and take actions to create security (identity); and because an actor behaves as if they are in an anarchy, the actions taken tend to reinforce that anarchy (social relationship). It is a chicken and egg situation. The development of constructivist thought was instrumental in a large shift in thought regarding security.

### **Human Security**

As already acknowledged, security is a disputed topic; human security is even more so. At the foundation of human security is the understanding that the human is the referent object, that is, the *thing* to be kept secure.<sup>18</sup> As outlined above, this conflicts with the more traditional view in security studies of the state being the entity to be secured. For this reason, it is logical that a discussion of human security should follow the discussion of constructivism.

Human security first emerged as a concept with the publishing of the United Nations Development Program (UNDP) Human Development Report in 1994. The 1994 Human Development Report adopted a human focused approach to discussing security issues.<sup>19</sup> The report defined human security in terms of seven factors: personal,

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<sup>17</sup> Agius: 95-96.

<sup>18</sup> Pauline Kerr, "Human Security," in Alan Collins, *Contemporary Security Studies* Third Edition. Toronto: Oxford University Press 2013: 106.

<sup>19</sup> United Nations Development Program (UNDP) "Human Development Report," last accessed 27 May 2015, [http://hdr.undp.org/sites/default/files/reports/255/hdr\\_1994\\_en\\_complete\\_nostats.pdf](http://hdr.undp.org/sites/default/files/reports/255/hdr_1994_en_complete_nostats.pdf): 24-33.

environmental, economic, political, community, health, and food security. Among the advocates for human security, there are two main schools of thought: the *narrow* and *broad* schools. The *narrow* school of thought focuses on the threat of violence against people and can be characterized as advocating the idea of *freedom from fear*. In practical terms, Canada was one of the first nations to embrace this form of human security in its foreign policy, focusing primarily on physical threats to people. The *broad* school on the other hand is concerned that freedom from fear does not go far enough; this school includes the consideration of *freedom from want*. This perspective is can be described as:

. . . concerned with the protection of people from life threatening dangers regardless of whether the threats are rooted in anthropogenic activities or natural events, whether they lie within or outside states, and whether they are direct or structural.<sup>20</sup>

This view is consistent with the vision of human security outlined in the previously mentioned 1994 UNDP Human Development Report. The concept of sustainable development (SD) emerged in the late 1980s, and is very compatible with the notion of human security.

## **Sustainable Development**

Why are we interested in *sustainable development*? SD as we appreciate it today was first articulated in the 1987 OECD report *Our Common Future*, commonly known as the Brundtland Report:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.<sup>21</sup>

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<sup>20</sup> R. Thakur, "A Political Worldview," *Security Dialogue* 35 no 3:347.

<sup>21</sup> World Commission on Environment and Development (WCED) "Our Common Future. Oxford: Oxford University Press, 1987: 43. Here after cites as Brundtland.

Without needing to go into an in depth analysis, it is clear that Brundtland's ideation of SD is quite compatible with the concept of human security as espoused by UNDP seven years later. SD appears to satisfy most of UNDP's seven tenets. So, what is SD?

The components that make up SD are not new. The idea evolved out of different environmental movements and various cultures' recognition of the need for humans to live in cohesion with the world around them. The new aspect of SD was the discussion of this *harmony* in terms of politics, the economic, society and environmental sectors.<sup>22</sup> The Rio Earth Summit in 1992 saw a marked increase in the visibility of SD with the adoption of Agenda 21, which called on each country to create a national SD strategy.<sup>23</sup> One of the challenges faced by SD champions is that it is a paradigm that evokes a great deal of passion and emotion, but not a great deal of action. This is primarily because very few paths have been identified that will allow a modern industrial economy to develop without taking the future hostage for the gratification of the wants and needs of today; the inverse would be where needs of today are not met and wants are suppressed with a view to protecting our legacy to future generations.<sup>24</sup> Essentially, we have not found balance. Like security, SD is not a monolithic or homogenous concept. Over time, there has been tension between the proponents of having SD grounded in ecological sustainability and proponents of the contemporary approach to SD, which has economic sustainability at its

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<sup>22</sup> International Institute for Sustainable Development (IISD), "Introduction to Sustainable Development.) last accessed 27 may 2015, [https://www.iisd.org/pdf/2011/intro\\_to\\_sd.pdf](https://www.iisd.org/pdf/2011/intro_to_sd.pdf). and Global Issues, "What is Sustainable Development," last accessed may 17 2015, <http://www.globalissues.org/article/408/sustainable-development-introduction#WhatIsSustainableDevelopment>.

<sup>23</sup> Global Issues.

<sup>24</sup> Graciela Chichilnisky, "What is Sustainable Development," *Land Economics* (Nov 1997), 73 no. 4: 467.

core.<sup>25</sup> Bringing the conversation full circle, when considering SD, the World Bank “. . . recognizes that growth must be both inclusive and environmentally sound to reduce poverty and build shared prosperity for today’s population and to continue to meet the needs of future generations. It is efficient with resources and carefully planned to deliver both immediate and long-term benefits for people, planet, and prosperity.”<sup>26</sup> That sounds suspiciously similar to the definition coined by Brundtland almost 30 years ago. Taking the discussion further, the World Bank talks about the three pillars of SD: economic growth, environmental stewardship, and social inclusion. Interestingly enough, these can be mapped to the seven factors of human security.<sup>27</sup> Based on this admittedly cursory analysis of human security and SD, the two concepts are quite compatible. So, how do we reconcile competing camps in SD discourse? It is simple. Find common ground that satisfies the intellectual debate and provides tangible benefits to advance both the seven factors of human security and the three pillars of SD. The common ground is *hemp*.

### **Hemp.**

#### **Hemp the magical fibre?**

#### **Hemp! What are you smoking?!?**

*Hemp* is a versatile plant that offers intriguing potential as a solution to the question of how we can sustainably address the factors of human security. During initial research for this paper, I was considering hemp as a solution to the question of sustainable development in the South. As the paper has progressed, I realized that hemp

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<sup>25</sup> Joy Patton, “What’s Left of Sustainable Development?” *Journal of Australian Political Economy* no. 62: 95-109.

<sup>26</sup>The World Bank, “Sustainable Development Overview,” accessed on 27 May 2015, <http://www.worldbank.org/en/topic/sustainabledevelopment/overview>.

<sup>27</sup> Ibid for the pillars of SD. See UNDP: 24-33 for a discussion of the seven factors. I see the factors mapping onto the pillars like this: Economic Growth = Economic and food security; environmental stewardship = environment and food security; and social inclusion = personal, political, community and health security. I recognize there is some overlap, but the similarities are there.

is potentially a great equalizer between the developed world and the less developed world. Throughout history, hemp has been an important crop. It is only in relatively recent times that industrial hemp has been banned due to an ignorant inability to distinguish it from its psychotropic cousin marijuana.

## Background

Industrial hemp (referred to as hemp from this point onward) has been a historically important crop. Currently, hemp cultivation is heavily restricted by interpretation of various narcotics laws. This is ironic given the importance of the hemp crop over the history of that country. For example, the US Constitution was written on 'hemp' paper. The production of hemp was mandatory during the establishment of the colony of Jamestown and in early communities in Massachusetts and Connecticut.<sup>28</sup> In the 1990s, hemp began to make a comeback around the world, but primarily in Europe. Hemp shows incredible promise in a variety of areas. It provides a source of dietary protein, can be used as a biomass fuel stock, a source of incredibly strong and resilient fiber that can be used for the manufacture of clothing, building materials, car parts, environmental remediation, hardiness, many other value added goods and finally, it is a hardy and adaptable plant that can grow in diverse geographical, and environmental conditions.<sup>29</sup> Hemp has been characterized as the ultimate sustainable resource. In this context, hemp has several beneficial characteristics. It can be grown herbicide, pesticide, and fungicide free; it is hypoallergenic; biodegradable and is grown as a weed

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<sup>28</sup> Kolosov, Christine A. "EVALUATING THE PUBLIC INTEREST: REGULATION OF INDUSTRIAL HEMP UNDER THE CONTROLLED SUBSTANCES ACT." *UCLA Law Review* 57, no. 1 (October 2009): 238.

<sup>29</sup> Kolosov: 241-244.

suppressant in crop rotation systems due to its fast growing canopy.<sup>30</sup> With this in mind, it becomes easy to see hemp as an environmentally sustainable alternative over the many other raw materials on which we have come to rely for modern living. How does hemp address the economic pillar of SD?

## Hemp and Sustainable Development

Industrial hemp and the commercial and manufacturing industries that it feeds offers economic benefits in areas that would otherwise be economically marginal. Hemp makes sense from a commercial and industrial perspective on a number of levels. Hemp can be cultivated in otherwise marginal agricultural lands, providing feedstock for a variety of industries such as:

**Plastic Products** – Hemp can replace most toxic petrochemical products. Research is being done to use hemp in manufacturing biodegradable plastic products like, plant-based cellophane, recycled plastic mixed with hemp for injection-molded products, and resins made from the oil.

**Food** – Hemp seeds are nutritious and contain more essential fatty acids than any other source, are second only to soybeans in complete protein (but is more digestible by humans), are high in B-vitamins, and are a good source of dietary fiber. Hemp seeds are not psychoactive and cannot be used as a drug.

**Fabric Products** – Hemp fiber is among the Earth's longest natural soft fibers. It is more absorbent, more durable, and more insulative than cotton fiber. It is also flame retardant. Plus it uses less fertilizers, herbicides and pesticides to grow.

**Paper** – Hemp paper resists decomposition, and does not yellow with age when an acid-free process is used. It can also be recycled more times than wood-based paper. Hemp produces more pulp per acre than timber on a

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<sup>30</sup> The Go Green Network (GoGreenBlog), "Hemp – The Ultimate Sustainable Resource," last accessed May 27 2015, <http://thegogreenblog.com/hemp-the-ultimate-sustainable-resource/>. In regard to the use of fast growing hemp as a weed suppressant/cover crop, some jurisdictions in the United States consider Hemp a noxious weed due to its virulent/robust growth habit. See Jim Camden, "Hemp could be noxious weed, some farmers worry." Spokesman-Review, The (Spokane, WA), March 21, 2014., Newspaper Source Plus, EBSCOhost (accessed May 27, 2015).

sustainable basis, and can be used for every quality of paper. Hemp paper manufacturing can reduce wastewater contamination. Hemp's low lignin content reduces the need for acids used in pulping, and its creamy color lends itself to environmentally-friendly bleaching instead of harsh chlorine compounds. Less bleaching results in less dioxin and fewer chemical by-products.

Wood Products – Hemp fiberboard produced by Washington State University was found to be twice as strong as wood-based fiberboard. No additional resins are required due to naturally-occurring lignins.

Fuel – According to the Department of Energy, hemp as a biomass fuel producer requires the least specialized growing and processing procedures of all hemp products. The hydrocarbons in hemp can be processed into a wide range of biomass energy sources, from fuel pellets to liquid fuels and gas. Development of bio-fuels could significantly reduce our consumption of fossil fuels and nuclear power.<sup>31</sup>

The supporting industries can be established in economically depressed areas and the resultant commerce would benefit the people through providing jobs in agriculture, manufacturing, research and do so with a reduced environmental footprint when properly managed.

## Conclusion

The cultivation and creation of value added products from hemp satisfies the three pillars of sustainable development. Furthermore, it bridges the gap in the sustainable development community between the camps that emphasize the primacy of environment and those who are primarily concerned with economic sustainability. Hemp is a truly environmentally sustainable resource that requires little in the way of additional input to become a productive crop. It could become the basis of a vertically integrated commercial/industrial sector that uses the same crop to produce fiber based products for consumer, commercial and industrial use, alongside oil based products that may be used

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<sup>31</sup> *IBID.*

for fuel, a highly nutritional food source, and/or the basis of a chemical industry that has the potential to reduce and possibly replace modern societies' reliance on petrochemicals. Imagine if hemp production was embraced in economically depressed regions around the world. The hemp industry could conceivably form the basis of a self-sustaining, economically viable and environmentally friendly society.

Bringing the discussion back to security studies, cultivation of hemp and the establishment of a hemp based industry offers serious benefits in enhancing world security. For example, the United States has spent over \$7B in the past decade on combatting the opium trade in Afghanistan. Much of the profit from that trade has gone toward supporting activities of terrorist organizations such as the Taliban and Al-Qaeda.<sup>32</sup> Picture this, a forward thinking staff officer or USAID official proposes to their chain of command that they work with the Afghan people who are growing poppies in order to assist them in a switch to growing hemp. In one fell swoop, we have established the basis for an indigenous, potentially vertically integrated industry in Afghanistan. It is an industry that could produce food, clothing and fuel in a country without a great deal of security in any of those areas. Imagine if the criminal and terrorist organizations resident in Afghanistan were cut off from their source of income.<sup>33</sup> Imagine if Afghanistan could increase its food and energy security simply through converting its poppy fields to hemp and creating the industrial and commercial infrastructure to support that sector. Bringing the discussion closer to home, government and law enforcement have typically opposed the cultivation of hemp. Normally, these groups have claimed that hemp would be used to

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<sup>32</sup> Mother Jones, "We Spent \$7.6 Billion to Crush the Afghan Opium Trade—and It's Doing Better Than Ever," last accessed 27 May 2015. <http://www.motherjones.com/politics/2014/10/afghanistan-opium-poppies-heroin-record-levels>.

<sup>33</sup> Afghanistan produces approx. 80% of the world's illegal opium crop. *IBID*.

mask or hide illegal marijuana plantations. This specious logic flies in the face of two key realities. Hemp plantations are planted with seeds sown very densely in order to produce plants that grow tall and straight. Marijuana plants are spaced out so they can maximize flower production. Additionally, planting marijuana in proximity to hemp would actually reduce the potency of the marijuana crop, as hemp pollen is known to spread in a 12 kilometre radius around the crop, thus neutralizing the marijuana planting to a certain degree.<sup>34</sup> Based on that, it would appear that law enforcement should be supporting the planting of hemp.

The cultivation of hemp is a sustainable activity that should be embraced around the world. Initially, this paper was meant to address issues of sustainable development in the less developed parts of the world. After looking at the issue of security and sustainable development, it is clear that hemp offers a path towards building a sustainable future, in line with the philosophy of the Brundtland report where we meet the needs of the present without compromising the ability of future generations to meet their own needs. That is something to which to aspire no matter where we live.

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<sup>34</sup> Kolosov: 250.

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