# Goats CP

#### Counterplan: The United States should substantially subsidize the production and global distribution of genetically modified goats to replace the use of cows.

#### Genetically modified goats produce substantially less emissions then cows, which helps reduce the effects of climate change. Graph in the doc.

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The advantages of goats for future adaptation of livestock to CC [Climate Change] include their ability to actualize 'green agriculture production system' free of large environmental pollution, which typically links with the intensive dairy cows production systems. In this respect, the contributions of goats to protecting the natural life habitual and organic production of food become important considerations (Çoban et al., 2008). 'Green agriculture production system' contribute to mitigating the negative effects of abiotic pollutions on human health, which derives to large extend from the uncontrolled use of substances such as antibiotics, which cause the emergence of new diseases, or complications such as resistant bacteria (Çoban et al., 2008).The impacts of CC on goat production analyses as the direct or indirect effects of climatic factors (Silanikove and Koluman, 2015). The goat’s interactions with environment in relation to their physiological stage, as well as issues of the uses of natural resource, waste management and crop production become prominent. Reviews on this subject that goat are superior to other ruminants in those respects (Silanikove, 2000; Silanikove and Koluman, 2015). However, a common mistaken belief which repressed goat production is political, social and economic sanctions forced in order to decrease the greenhouse gas emission (Steinfeld et al., 2006). The total greenhouse gas emission is closely related to the number of goats. Thus, the use of high productive breeds of goats can become an important strategy to reduce greenhouse gas from goats. To achieve this goal, improving the adaptation of goat genotype to their environment will become imperative. The economical input on lessening the impact of climate conditions is closely related to a goat’s biological capacity. Accordingly, these two factors have an impact on economical considerations. In regard with livestock production, efforts should be made to improve the genetic capacity with regard to the type of goat and increasing the production level per goat. The biological environmental conditions should be taken into consideration in terms of pollution to be caused by preferring conventional methods in the use of natural resources in order to increase production in the unit area. In this respect, issues of protecting the natural life and organic production will become significant. Furthermore, the negative effects on livestock farming, which derives from uncontrolled use of substances, cause the emergence of new diseases that inflict humans. In conclusion, the considerations to use goat or any other farm animal in a given environment should take into account pollution caused by greenhouse, as well as inability to control the waste management in an effective way. Thus, certain negative environmental outcomes that are associated with livestock production are unavoidable; however, choosing to raise goats could minimize those outcomes. Human food is indispensable input for survival. Hence, food production and nature-agriculture relationship have been always on the agenda. The intensive use of conventional inputs and the competi-tion between food for humans and feed for livestock have raised objections on intensive use of ruminants as source of food for humans, in addition to consideration on their significant input to greenhouse gasemission (Silanikove and Koluman, 2015). In specific regards to goats: problems such as inability to come up with an alternative to stubble burning and similar activities. Lack of an appropriate diet and use of high-quality feed in goat breeding and the pollution which emerges during the production and goat transfer processes should be taken into consideration in the process of CC (Koluman et al., 2011). At this point, conventional or traditional production systems will become another issue to be discussed.A better understanding of the advantageous and disadvantageous ofnative resources of goat breeds within a regional projection are highlysignificant with regard to the success of adaptation programs to beimplemented in the long run. Applying genetic and biotechnological approaches are also means to improve adaptation to [Climate Change] CC. However, inthe present review we would like to emphasize on the local gene resources’, which offer resistance and endurance to local extremeenvironmental conditions. Methane emission in which the live weightand productivity level of local goats considered should also be put forthinsuch approach. A pilot study, which was performed on this subject, isdescribed below. The calculations that we have made on the methaneemission from livestock in Turkey took methane released from thegastrointestinal tract, or through manures by cattle, sheep and goats pergoat in different ages and physiological conditions according to IPCC(2007) into account as indicated in the table below (Table 1; based on The annual methane emission of the cattle, sheep and goats in Turkey with origins ofenteric and manure.

