Questions for Working with the texts:

Which explanations for the formation of war can be found in the texts?

How do you asses the arguments and how could we use these facts in a discussion about root causes of migration and fleeing?

• Source 1: newspaper article Süddeutsche Zeitung 4th March 2015 von Markus C. Schulte, https://www.sueddeutsche.de/wissen/ausloeser-von-krisen-was-dersyrische-buergerkrieg-mit-dem-klimawandel-zu-tun-hat-1.2377566

What has the civil war in Syria to do with climate change?

Oppression, Conflicts between religious and ethnic groups – the uprising in Syria hat various root causes. US-scientists suspect, that an extreme drought has also contributed to the uprisings.

For years scientists and militaries are discussing whether water shortage is a root cause for conflicts and war – and in the face of climate change – will be more often in the future. The World Climate Council IPCC warned 2014 in his climate report that the deserts will spread and the drought will increase, this could lead to hunger catastrophes, streams of flight and indirectly towards civil wars and violence between groups.

US-scientists suspect that such factors also played a role 2011 during the eruption of the Syrian civil war. The report at the scientific magazine PNAS, that there are indications for a connection between climate change and an extreme drought, that reached between 2006 and 2010 parts of the so called fruitful half moons between Euphrat and Tigris. Affected have been Turkey, Iraq and Syria. At the nord-east of Syria – the corn chamber of the country – "the agricultural system was breaking down" – Colin Kelley and his collegues wrote this from the university of Santa Barbara.

There happened extreme crop failures, many farmer lost big parts of their livestock herds. When the rain came back there was a fungus spreading, who destroyed almost half of the harvest. The price for corn was rising between 2008 and 2010 for 27 percent. Malnutrition became a problem, that especially affected children.

One factor from various factors

Many families, that are living from agriculture, lost their basic existence and were fleeing in the cities like Dar´ar, Homs and Hama at the nordeast of the country. Up to 1.5 Million especially young people were encountering in the suburban areas around the cities more than one Group 1: Root Cause War Put together for the workshop: Root causes of migration and fleeing & climate justice at the climate camp 2018

million of refuges from Iraq – with them they were compete for jobs, houses, nutrition, water and energy.

Additionally, the Syrian population had increased dramatically – from four million people in the year of 1950 to 20 million people in the year of 2010. This competition for resources reinforced the dissatisfaction in the country. According to the scientists this could also have led to the demonstrations and uprisings that have been led towards civil war.

"We do not claim, that the drought or the human caused climate change were the trigger for the uprising.", says Kelley the british *Guardian*. The scientists are aware of the fact that many Syrians have been suffering from the oppression of Assad independently of the drought happening and that there have been conflicts between different ethnic and religious groups. Also parts of the population hoped for change in their countryfacing the "Arabic spring" and the overthrow of governments in Tunisia, Egypt and Libya.

Kelley and his team stress therefore, that the long-term trend towards less rain and climbing temperature in the region has contributed to a drought that has been worse than otherwise.

The fruitful half moon, the place of origin for agriculture since 12 000 years, has been threatened by droughts regularly. The data since 1931, which the scientists were analysing, shows that during the 50s, 80s and the 90s there have been strong droughts. But the current drought was the longest and hardest. And also a repetition of these precarious situation is probable: The World Climate Council IPCC has warned in the report of 2014 that the climate warning could dry out the Middle East.

The consequences for the agriculture have been so dramatically during the last years, because the Assad-regime is focusing on cultivation of cotton and other products that can be easily exported. To water the fields they used large amounts of ground water – also by using illegal wells. That has serious consequences. The ground-water level sunk, how the scientists could see over satellite pictures.

Water shortage puts societies under pressure

How Andrew Solow from Woods Hole Oceanographic Institution in Massachusetts told the *New Scientist*, the conclusions of his colleagues are "plausible". "When a society comes under pressure, violence becomes more probable." But it is unclear, whether the violence in Syria would also be happening without the drought. It could also have happened says Kelleys Co-author Richard Seager from the Columbia University towards the Magazin *National Geographic* – but that's not the way things actually have happened. Group 1: Root Cause War Put together for the workshop: Root causes of migration and fleeing & climate justice at the climate camp 2018

There has been contradiction from Thomas Bernauer from the ETH Zürich. He says the postulated connection is "very speculative", the facts are not scientific robust.

Kelley and his team are not the first one, pointing out a possible connection between the drought of 2006 and the eruption of the civil war in Syria. Francesca de Chatel from the Radboud university in Nijmegen Netherlands pointed out at the beginning of 2014 in *the Journal Middle East Studies*, it has not been the drought "per se", that has been the root cause of the uprising. More important the failure of the government in Damaskus to handle the drought has been leading towards the uprising. And Peter Gleick, president of the Pacific Institute in Oakland, California, said 2014 in the Journal *Weather, Climate and Society* that the water shortage in Syria has played a "direct role" for the collapse of the economic system in Syria.

Following Gleick, the conflicts around drinking water have been rising in many countries. Conflicts can't be traced back to one root cause. But factors like water should be more focused during the research for the root causes of conflicts, many researchers are demanding.

Everything for Survival

Although the United Nations are not expecting "Water Wars". The experience proves, that countries with shared water resources like lakes and rivers are more often finding peaceful solutions. "But if the competition around scarce resources grows, this could change" mentions a report of the United Nations University "Water in the World We Want" from 2015. "If it's about life or death, humans are tend towards doing everything to survive." the US-scientists are pointing out.

Also the office of the director of National Intelligence, which coordinated the work of the US-intelligence services, writes in a report from 2014 the competition around scarce resources will be the root cause for climbing tensions between states. And the World Economic Forum warns in a report "Global Risks 2015" the effects of climate change towards "the possibilities of agriculture for nutrition and the supply of water could erupt uncontrolled and sudden movements of migration, that could lead towards further pressure on the affected countries."

Also California had to struggle with droughts that also have been influenced by climate warming. That there haven't been violence and migration in USA has to do – following Kelley – with the resistance of the social systems to absorb this kind of shocks. "Syria has been vulnerable before the drought" – he explained the *New Scientist*.