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Legal Status and Legal Treatment of Environmental Refugees

Summary

by

Margit Ammer

Prof. Manfred Nowak (Project leader)

Ludwig Boltzmann Institut für Menschenrechte, Wien

Lisa Stadlmayr

Prof. Gerhard Hafner (Project leader)

Universität Wien, Rechtswissenschaftliche Fakultät, Abteilung Völkerrecht und Internationale Beziehungen

On behalf of the Federal Environment Agency (Germany)

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P.O.B. 14 06

06813 Dessau-Roßlau

Germany

Phone: +49-340-2103-0 Fax: +49-340-2103 2285

Email: info@umweltbundesamt.de

Internet: http://www.umweltbundesamt.de
http://www.umweltbundesamt.de

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Ralf Becker

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1 Coverage and Goal of the Study

Lacking a legally binding definition of 'environmental refugees', the following working definition (developed following an analysis of pre-existing definitions in the literature) forms the basis of this study: 'Citizens and persons with permanent residence who had to leave their home either within their State of origin or across borders, temporarily or permanently; the decisive, immediate trigger for leaving is environmental change induced by human or natural causes which poses a serious threat to their lives or livelihoods.'

Thus, the study includes not only situations of man-made environmental change (in particular, climate change or industrial accidents, for example) but also situations of 'natural' changes in the environment (e.g. earthquakes, volcanic eruptions) that force people to leave their home.¹

The study explicitly does not cover involuntary migration caused by development assistance projects, by adaptation measures (relocations associated with construction of dams) or by conflicts (which might be partly due to a lack of resources as a consequence of environmental change).

Since isolating environmental change precisely as the single cause for migration is most often not possible due to the multi-causality of 'environmental flight situations', it suffices for the purposes of this study that environmental change constitutes a decisive cause for involuntary migration.

The 'seriousness' of a threat to life or livelihood is closely related to the extent to which situations of environmental change affect minimum levels of basic human rights.

The study covers both transboundary as well as internal 'environmental flight situations' (depending on the existence of a transboundary element, the terms 'international' or 'internal environmental refugees' are used).

The term 'environmental flight situation' covers – in accordance with the working definition – all situations of environmental change, which pose a serious threat to life or livelihoods (also including gradual processes) and *may* therefore possibly trigger involuntary migration. The term (internal or international) 'environmental flight' refers – in contrast to the term 'environmental flight situation' – to the *actual* involuntary departure from the home (internally or internationally) for the reasons mentioned.

As a **first step**, the study examines (on the basis of the working definition of 'environmental refugees') **existing State obligations under international law** (obligations of the State of origin and of third States), which are relevant for the **prevention of 'environmental flight'** as well as for **coping with**

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The inclusion of both groups in the definition does not rule out the possibility of different State obligations depending on the cause of environmental change (man-made or not); in particular the rules on State responsibility require the attributability of a 'wrongful act' to a specific State for the existence of secondary obligations – in situations of non-man-made environmental change, those rules will be hardly relevant.

'environmental flight' (through the reception of 'international environmental refugees' and protection of 'internal environmental refugees').

For the purpose of this study, the **prevention of 'environmental flight'** covers the following situations:

a) Prevention of situations of environmental change as such (e.g. reduction of greenhouse gas emissions, sustainable energy use, reducing emissions through 'carbon budgeting', use of better technologies and afforestation, prohibitions regarding air pollution, general environmental protection measures and the prohibition of transboundary damage).

The investigation of these obligations is of relevance for two reasons: firstly, it serves the immediate avoidance of environmental change; secondly, the violations of those obligations can result in State obligations in accordance with the rules of State responsibility (e.g. compensation). The enforcement of those secondary law obligations could be of importance for the countries of origin concerned as well as 'environmental refugees' in the context of an 'environmental flight situation' and 'environmental flight'.

- b) Reducing the vulnerability of an area or population that results from physical, social, economic and environmental factors with regard to the realisation of 'environmental flight situations' (so-called adaptation measures; e.g. developing risk-zone maps, improving land use, introducing and enforcing building policies, improving early warning systems).
- c) Preventive minimisation of the negative consequences of 'environmental flight' situations before the realisation of a danger ('preventive mitigation');
- d) Mitigation of the impact of 'environmental flight situations' when they occur, in order to prevent 'environmental flight' ('mitigation').

Prevention of 'environmental flight'				Coping with 'environmental flight'	
Prevention of situations of environmental change as such (environmental-/ climate protection)	Adaptation measures (Reduction of vulnerabilities)	Preventive mitigation measures (Preventive minimisation of the consequences of 'environmental flight situations')	Mitigation measures (Mitigation of the impact of occurring 'environmental flight situations')	Protection of 'internal environmental refugees'	Reception of 'international environmental refugees'

The sources of law that are investigated in this study are international norms on human rights protection (including international refugee law), international environmental law (including climate change law) as well as international norms on civil protection and disaster relief. This 'inventory' of existing primary international law also forms the basis for the analysis of any relevant secondary State obligations in accordance with the rules of State responsibility.

As a second step, based on this inventory and a deficit analysis, a catalogue of desirable State obligations and individual rights aiming for the best possible protection for (potential) 'environmental

refugees' is established. Following a comparison of the advantages and disadvantages of different regulatory models, a specific, 'ideal' proposal is developed.

2 Inventory of existing international law obligations relevant for the prevention of 'environmental flight' as well as for addressing situations of 'environmental flight'

2.1 Potential primary obligations of States of origin and third States with regard to the prevention of 'environmental flight'

2.1.1 Obligations stemming from the international human rights regime

Currently, the international human rights regime lends itself primarily to creating **obligations of the State of origin** towards people who are located in its territory or under its jurisdiction.² **Extra-territorial obligations** of third States can be deduced from international assistance and cooperation obligations in the context of economic, social and cultural rights (ESCR); those obligations are **complementary** to those of the State of origin. The existence of those extraterritorial obligations with regard to the obligation to *respect* human rights is widely undisputed (e.g. a commitment by third States not to undertake any activities which could have negative effects on the realisation of ESCR in the State of origin - especially development projects, which are excluded from the scope of this study); in contrast, the extent of positive obligations, in particular the obligation to *fulfil* ESCR, is widely disputed.

The following obligations particularly concern the obligations of the State of origin:

So far, human rights obligations of States in an environmental context have been either deduced from a substantive right to a healthy environment, from procedural rights (e.g. rights to access to information, rights to participation) or from rights presupposing a healthy environment. A substantive right to a healthy environment is currently only established at the regional level (contractual and customary law); on a universal level, this right is not yet clearly articulated; accordingly, no clear universal State obligations can be identified (yet).

In view of the current lack of such a universal provision in international law, effort is made to derive a **right to a healthy environment indirectly as a component of other human rights** that presuppose a healthy environment; these other human rights can be civil and political rights (e.g. right to life, right to private life), ESCR (e.g. right to health) as well as collective rights. While **State obligations** concerning the **prevention of 'environmental flight'** are not explicitly stipulated in treaty law, they can be identified by way of interpretation of those rights (at the regional and universal level). Obligations obviously only exist as far as environmental changes have a negative impact on the rights of the individual. Such

Currently, it is hardly possible to hold third States (often the main emitters of greenhouse gases) accountable for human rights violations caused by activities taken on the territory of the third State but having negative impacts in another State (State of origin) (e.g. emissions). Very innovative approaches to this question are currently taken, however, it remains to be seen whether they find support in the international community.

obligations derived from this interpretation cover all four areas mentioned above. However, due to differences in the interpretation of various rights from different legal sources and at different levels (regional / global) by different treaty bodies, no general statements regarding the exact scope and content of those obligations can be made so far. Obligations resulting from the interpretation include: obligations concerning the **prevention of environmental change as such** (e.g. obligation to carry out environmental impact studies, obligation to regulate the conduct of private actors; obligation to provide the population with the right to participate in decision-making processes which could have an impact on the environment); obligations concerning **adaptation** (e.g. obligation to inform the public about environmental risks and possible actions to avoid these risks); obligations concerning the **preventive minimisation of consequences of 'environmental flight situations'** (e.g. obligation to inform the public about potential environmental changes and corresponding rights to information and participation); obligations concerning the **mitigation of the impacts of 'environmental flight situations'** (e.g. obligation to provide access to legal remedies, to review and redress procedures, obligation to support the population in coping with the situation, obligation to assist affected persons in resettlement efforts).

However, **limitations** of the human rights regime with regard to the effective protection exist: violations can generally only be determined and claimed *after* damage has already occurred - and not in anticipation of looming environmental changes (e.g. concerning the predicted effects of climate change); rights that are not absolutely guaranteed have to be weighed against public interests (including economic interests); the competence of authorised treaty bodies to award compensation to victims of human rights violations is restricted. In addition, disadvantages stemming from the indirect derivation of State obligations are: stark differences between the possibilities of enforcement for victims in similar situations depending on the forum to which they have access (due to the application of different standards concerning e.g. the extent of due diligence demanded from States; divergent interpretations of concepts such as access to information and participation; different rules regarding the access of non-State actors and regarding the legal quality of the outcome of the procedures).

During and after an 'environmental flight situation' the State of origin continues to be obliged to respect, to protect and to fulfil human rights (exceptions exist in cases of public emergency). The *Operational Guidelines on Human Rights and Natural Disasters* (2006) provide useful documentation on how human rights apply during (but also before and after) natural disasters. Regarding 'internal environmental refugees' the *Guiding Principles on Internal Displacement* are applicable. While it is contested whether these principles form part of customary international law, it is undisputed that they at least partly reflect existing international obligations; their added value consists *inter alia* in showing how

³ Civil and political rights (with the exception of so-called non-derogable rights such as the prohibition of torture or slavery) can be derogated from – to the extent necessary - in case of public emergency (including severe natural or environmental disasters such as earthquakes, floods, cyclones, nuclear accidents), which affect the whole population and which constitute a threat to public order. International treaties on ESCR do not include derogation clauses and even treat victims of natural disasters and people living in disaster-prone areas as particularly vulnerable groups; the State is obliged to directly guarantee at least a minimum of ESCR ('duty to fulfil-provide').

human rights provisions oblige the State of origin to take mitigating measures during 'internal environmental flight'. They are therefore a valuable tool in developing national policies and laws. However, the inability or unwillingness of most States that are affected by internal displacement to fulfil their responsibilities towards Internally Displaced Persons remains a problem.

2.1.2 Obligations stemming from other international norms (in particular, those concerning the protection of the environment including the climate)

International environmental law (including international climate law) is – in contrast to human rights instruments – primarily relevant with regard to obligations of third States (in many cases this branch of law regulates transboundary situations).⁴ On the one hand, there are specific **primary** duties of these States, which are relevant in connection with the prevention of 'environmental flight'. On the other hand, **secondary** obligations resulting from the violation of those primary duties might also be of relevance; these might constitute important tools for an injured State of origin in order to prevent 'environmental refugees' from the outset, or to mitigate their consequences. ⁵

2.1.2.1 Obligations to prevent situations of environmental change as such

The investigation of obligations concerning the prevention of environmental change as such is of relevance for two reasons:

On the one hand, prevention of serious environmental degradation is the most obvious way to prevent "environmental flight" (the problem is addressed at its source) – the reason for flight can thereby be avoided from the very beginning.⁶

On the other hand, the identification of obligations relating to the prevention of environmental change is relevant since – in accordance with the rules on state responsibility – their violation results in secondary law obligations (in particular obligations relating to cessation of the internationally wrongful act and to provide compensation).

International treaties on environmental (including climate) protection contain a series of obligations to prevent transboundary environmental change, provided that States have ratified the relevant treaty. In the context of climate change, the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol (KP) are of major importance; to a certain extent, very specific obligations regarding the prevention of climate change can be derived from these treaties, e.g. the reduction of greenhouse gas

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Also relevant obligations of States of origin resulting from the application of the Convention to combat Desertification or the Ramsar Convention have to be mentioned. Obviously, States of origin are also under an obligation to avoid transboundary harm. This is of relevance to this study since some scholars qualify the causation of international migration flows as causing transboundary harm.

Obviously, secondary obligations also arise in the case of violations of human rights law or of environmental law (including climate law) by States of origin; however, this appears of limited relevance with regard to 'environmental flight situations'.

Since this study is not a study of international environmental (including climate) law, a general reference to the importance of the prevention of environmental change must suffice.

emissions. However, the exact scope of some of those obligations is very controversial, and the United States of America as one of the main emitters of greenhouse gases has not ratified the KP. Further obligations regarding the prevention of situations of environmental changes are derived from, for example, the Montreal Protocol to Reduce Ozone Depleting Substances, from the Geneva Convention on Long Range Transboundary Air Pollution and from the Convention to Combat Desertification.

The general **prohibition of significant cross-border damage in international customary law** is well suited to justify preventive obligations in connection with the execution of 'dangerous' activities (i.e. activities that are likely to lead to a situation of environmental change); this has been confirmed several times in international jurisprudence. Accordingly, States have to take all reasonable measures in order to prevent or minimise environmental damage in other States. This norm is of particular interest in the absence of specific contractual obligations. However, it seems problematic that such preventive obligations do not constitute absolute obligations to prevent damage (they oblige States only to take measures in accordance with a certain standard of care). The concrete scope of the obligations can thus only be determined in the individual case and depends to a great extent on the economic capacities of a State. Consequently, there are also ambiguities here regarding the exact scope of existing State obligations.

2.1.2.2 Obligations regarding adaptation to situations of environmental change

In the area of **climate protection** contractual obligations (for third States and the country of origin) exist with regard to adaptation measures, i.e. measures aiming to reduce vulnerability to (climate change induced) environmental change, (e.g. development of capacities or institutions in order to cope better with foreseeable damage). The implementation of such obligations by developing countries, i.e. the country of origin, however, is dependent on financial support by industrial States. The concrete scope of adaptation obligations according to the UNFCCC and the Kyoto Protocol remains unclear – they shall only be 'adequate'. Possible approaches include measures to ameliorate the resilience of health and social policies; of agriculture and forestry, of ecosystems, of watercourses and coastal as well as marine areas. Whether resettlement qualifies as an adaptation measure according to the UNFCCC and KP is not clear.

The importance of preventive measures (in the sense of adaptation⁷) has been increasingly stressed in the context of **disaster prevention**. The focus on the prevention of disasters is also reflected in international instruments and recent regional agreements. In general, the legal provisions in the area of disaster prevention are very fragmented. As far as regional binding agreements exist, their status of ratification is rather low. Global binding instruments do not exist in the area of environmental disaster prevention through adaptation and preparedness. Good guiding principles result from 'soft law' instruments such as the *Yokohama Strategy* and the *Hyogo Declaration*.

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E.g. land use planning (making awrae of particularly dangerous areas); risk distribution through insurances; sustainable forestry, infrastructural adaptation, rules relating to the construction of buildings.

2.1.2.3 Obligations regarding mitigation (preventive obligations and obligations after an 'environmental flight situation' has occured)

International treaties relating to environmental (including climate) protection provide only very rudimentary obligations with regard to the mitigation of environmental and climate damages. Comprehensive rules regarding compensation do not exist. An obligation to compensate for damages resulting from violations of primary international norms, however, can be deduced from principles of state responsibility if certain conditions are fulfilled (see below).

The principle of 'preparedness' is increasingly becoming relevant in the area of **disaster prevention**: measures (e.g. risk assessments, awareness raising, concrete allocation of tasks in case a disaster occurs) should already be taken before a disaster occurs in order to mitigate its potential negative impacts. In order to minimise damages, the **obligation to inform** immediately about imminent disasters is of central importance. This obligation is to be found in certain international treaties (e.g. with regard to oil pollution, nuclear incidents). However, currently instruments containing general obligations in connection with disaster prevention and disaster relief only exist on a regional level, – their ratification status und consequently their practical relevance is limited.⁸

In the context of measures aiming at the mitigation of disasters two central questions exist: Firstly, is the State concerned obliged under international law to claim or accept humanitarian aid? Secondly, are third States obliged to offer humanitarian aid after the request of the State concerned or do they also have the right – without invitation of the State concerned – to offer and deliver humanitarian aid even against the will of the State concerned? The primary obligation to deliver humanitarian aid lies with the State concerned (country of origin); only if it consents are third States allowed to deliver aid. An obligation of the State concerned to claim humanitarian aid does not exist *de lege lata*. However, a current trend towards changing this position can be observed, in particular in connection with the complete incapacity of the country of origin to cope with a disaster. While a general international legal obligation of the international community has not yet been established, it is argued that third States should contribute – in accordance to their capacities – to the mitigation of disasters. Third States have the right to offer aid – however, the 'imposition' of humanitarian aid is currently only possible through the UN Security Council. Some international instruments are developing towards including an obligation of the country of origin to accept aid if it is not in a position to protect its population.

Due to its narrow scope of application (genocide, war crimes, ethnic cleansing, crimes against humanity), the concept of the ,Responsibility to Protect' can be invoked only under exceptional circumstances to establish additional international obligations in the context of environmental disasters.

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See e.g. Inter-American Convention to Facilitate Disaster Assistance 1991; ASEAN Agreement on Disaster Management and Emergency Response 2005; Agreement between Member States and Associate Members of the Association of Caribbean States for Regional Cooperation on Natural Disasters 1999.

2.2 Potential primary norm obligations of the country of origin and third States with regard to the mitigation of ,environmental flight'

The *IDP Guiding Principles* play an important role with regard to the mitigation of 'internal environmental flight'— they are *per se* legally not binding. However, they reflect (for the most part) pre-existing obligations deriving from refugee law, human rights and humanitarian law. The Guiding Principles stipulate the rights of persons after their internal flight.

Third States could have *de lege lata* an international obligation to **accept 'international environmental refugees'** under the Geneva Refugee Convention (GRC) only under certain circumstances: the GRC could become applicable not only in the case of environmental destruction used as a weapon against a certain group, but also in other situations of environmental change - if a liberal teleological interpretation was followed. However, since the current State practice does not follow such an interpretation, legal bases other than the GRC need to be found.

It is not completely clear to what extent complementary forms of protection (based mainly on the *non-refoulement* principle) can be made use of in order to establish obligations of third States to accept 'international environmental refugees'. On a European level, Art. 3 European Convention on the Protection of Human Rights (ECHR) forms the strongest basis for such a claim (even though theoretically the violation of all ECHR rights could trigger a *non-refoulement* obligation). Currently, the *non-refoulement* principle is interpreted very restrictively on the regional level, especially in the context of the regime of ,subsidiary protection' of the EC Qualification Directive. While the personal scope of the regime of 'Temporary Protection' on EU level is wider than that of the regime of subsidiary protection (EC Qualification Directive), it seems unlikely that this mechanism will be triggered in the near future in the case of a mass influx of 'international environmental refugees' (the mechanism is triggered by a decision of the Council of the European Community on proposal of the Commission; the mechanism has so far never been used).

Many unresolved questions exist with regard to the 'disappearance' of States (particularly island States in the South Pacific, Indian Ocean or in the Caribbean). It is unclear under what conditions a State can be regarded to have 'disappeared' according to international law (when the population can only survive by leaving the country – even if parts of the territory are still above sea level; if the whole territory has submerged; or does the loss of territory through flooding *per se* not lead to the ,disappearance' of a State according to international law?). It is unclear whether a State ceases to exist if State territory 'disappears' or whether a certain form of recognition of non-existence is necessary; in the latter case, it would need to be established who is competent to make such a decision. Since the rules of State succession would not apply, the legal consequences of an assumably 'ceased' State would be unknown. Furthermore, the legal status of citizens of the ,disappeared' State would be unresolved (it is unclear whether they could be regarded as ,stateless' in accordance with the international statelessness regime (in this case the GRC would also be applicable if additional criteria were fulfilled)). However, it has been argued that the

defintion of statelessness was purposely drafted very narrowly and would thus not apply to a situation of *de facto* statelessness (i.e. instances where a person has a nationality, which is, however, ineffective in practice).

2.3 The role of the regime of State responsibility in connection with 'environmental flight' and 'environmental flight situations'

In the context of a violation of international primary norms relating to environmental (including climate) protection by **third States**, State responsibility can be invoked by the country of origin to demand cessation of internationally wrongful acts (and the taking of preventive measures) as well as reparation (restitution and/or compensation) for environmental damages inflicted. Both possibilities are relevant in connection with the **prevention of 'international environmental flight'**: on the one hand, situations of environmental change can be avoided from the outset (cessation of internationally wrongful acts and preventive measures); on the other hand, in the event of a situation of environmental change the responsible State can be called upon to provide reparation. However, these rules cannot provide a legal basis for reception obligations of third States. This is due to the limitation of secondary obligations to the obligation of cessation of an internally wrongful act and to the obligation of compensation of their consequences (through natural restitution or compensation).

Still, in concrete cases legal uncertainties exist and the international jurisprudence so far shows that States are rather cautious in asserting compensation claims in cases of environmental damages. It remains unclear whether this could change in connection with massive climate change-induced damages.

In the context of this study, the State responsibility of the **country of origin** is particularly relevant with regard to the violation of human rights; in many cases the individual concerned can assert a violation directly. In addition, assertion through the international community is possible – it is sometimes argued that many obligations (including regional obligations) with regard to the protection of the environment or to human rights are to be qualified as *erga omnes* obligations. Still, only the cessation of the internationally wrongful act and reparation on behalf of the directly violated State or the individual can be claimed.

Another interesting option is to derive an **international responsibility of States causing flight** from a violation of territorial integrity and/or sovereignty of the reception States. So far it has not been investigated whether States which indirectly cause migration (by causing situations of environmental change) could fall under the category of 'flight-causing' States. It is still unclear what would happen if, for instance, migrants asked for reception in one of those 'flight causing' States.

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It is contested, which concrete obligations have erga omnes character; this category includes e.g. the protection of fundamental human rights or in the area of environmental protection the protection of the ,common goods' against significant environmental damages.

3 Desirable contents and a concrete proposal

Based on an investigation of the *status quo* of existing international obligations of the country of origin and third States (relating to the prevention of 'environmental flight' or coping with 'environmental flight'), it becomes clear that normative as well as operational gaps exist with regard to the achievement of the best protection of individuals. Being a **cross-sectional issue**, 'environmental flight' cannot be regulated through measures taken in one single legal area. Rather, norms and strategies in the areas of *inter alia* development cooperation, human rights, humanitarian (disaster) aid or international environmental law need to be developed. In order to achieve optimal protection, all stages of prevention of 'environmental flight' and mitigation of 'environmental flight' need to be dealt with. It seems important that **long-term foreseeable 'environmental flight situations'** are addressed at an early stage, particularly through adaptation measures. Up to now, measures on the international level focused on addressing sudden environmental disasters. Additionally, the regulation of 'environmental refugee flows' is an important element in an overall solution.

With regard to the concrete **content of a new instrument**, the list of desirable obligations and rights is comprehensive (e.g. with regard to the prevention of 'environmental flight': the reduction of vulnerabilities through ongoing risk assessment, monitoring, adpatation measures; with regard to preventive minimisation of the consequences of 'environmental flight situations': early warning systems and measures of preparedness; with regard to minimising the consequences: supporting the population to cope with the effects; reception obligations; clear rules with regard to allocation of responsibility in the sense of a burden-/responsibility sharing). However, for the sake of 'political feasibility', the development of a comprehensive instrument will require compromises (e.g. differentiations in the binding character of norms depending on their contents).

Legally binding vs non legally binding

States tend to be less willing to accept internationally binding norms and to agree only on the 'lowest common denominator'. Besides, a legally binding instrument generally requires a lengthy drafting process and a rather long period of time until the entry into force of such an instrument. Nevertheless, a **legally binding instrument** is preferable: the implementation of rules regarding burden/responsibility sharing or regarding the reception of 'international environmental refugees' by the international community or third States on a non-binding level seems unrealistic. Apart from that, only a binding instrument can envisage concrete obligations of States, and – in the case of violations – concrete sanctions, State responsibility, and an enforcement mechanism. A legally binding instrument also needs to contain criteria according to which donor and recipient States can be identified and according to which a **list of donor-/recipient States** can be established.

Alternatively, parts of the content could be regulated in a binding instrument, while other contents could be established in a legally non-binding 'Steering-Instrument'. Rules on burden/responsibility-sharing, for

instance, would have to be dealt with in a legally binding way; a non-binding regulation could be envisaged for implementation techniques.

Besides inter-state obligations, a new instrument that is designed following a human rights-based approach, should also contain specific rights of the individuals and corresponding state obligations.

Regional vs Global

A regional restriction of a new instrument (in the sense of laying the burden solely on the States which are geographically closest to the country of origin, i.e. States which are generally not responsible for climate change and are not primarily responsible for situations of 'natural' environmental change), is in contradiction to the principle of common but differentiated responsibility and also to considerations of equity. A regional instrument seems acceptable only if the wider international community (or certain members thereof) provide some form of redress or reimbursement – in that case, the advantages of a regional instrument (such as faster agreement on a new instrument due to corresponding regional interests; higher efficiency) could be made use of. A **purely regional instrument**, however, **has to be ruled out**, as a sensible regulation of the allocation of burden-/responsibility on a regional level seems impossible. Alternatively, a global instrument regulating certain principles (particularly the sharing of burden-/responsibility) could be complemented by regional instruments, which build on the global instrument but take into account regional peculiarities.

Fragmented vs Comprehensive

Fragmented approaches focus on a specific area within efforts to prevent and cope with 'environmental flight' (e.g. focusing only on the reception of 'international environmental refugees'). Comprehensive approaches try to address all aspects of prevention of 'environmental flight' as well as coping with 'environmental flight'. As they usually address root causes as well as consequences, they offer long-term solutions. Since it seems indispensable to regulate not only the consequences of 'environmental flight', but to also include measures for the prevention of 'environmental flight' and thus a long-term solution, a comprehensive approach must be the first choice. One possibility would be to regulate a comprehensive approach in many different instruments (e.g. dividing the obligations regarding the reception of 'international environmental refugees' and other obligations, since the former attribute specific rights to individuals). However, such a division into several instruments carries the risk that the instruments will not be ratified to the same extent and by the same states.

New Autonomous Instrument vs Building on Existing Instruments

A new instrument should be independent and not be based on or linked to an existing regime (such as the UNFCCC, the Refugee Convention), even though this would bring the advantage of building on already established legal principles and institutions. Linking a new instrument to an existing regime would inevitably imply a limitation of the scope of the new instrument (e.g. a limitation to 'climate refugees' if connected to the UNFCCC; a limitation to reactive rather than preventive measures if connected to the Geneva Refugee Convention). A separate, independent instrument would also do justice to the scope of the problem and be best suited to provide an opportunity to overcome existing legal boundaries.

Burden-/Responsibility-Sharing

Rules relating to **burden/responsibility-sharing** must form part of a comprehensive instrument. Such regulation should be based on human rights considerations, on the polluter-pays-principle as well as on the principle of common but differentiated responsibilties. Another basis could be a newly interpreted concept of common heritage of mankind.

In the course of developing a burden/responsibility-sharing mechanism, the question needs to be answered whether (and to what extent) a **differentiation between 'environmental' and 'climate refugees'** should be made.

In general, all 'environmental refugees' – no matter whether the environmental change is climate-induced or not – **equally deserve protection.** Thus, in view of the goal to achieve the best-possible protection for individuals, a differentiation does not seem desirable. However, third States are not likely to be willing to accept obligations of the same scope with regard to 'natural' environmental change as with regard to, for example, climate change-induced incidents (in the latter case, the principle of common but shared responsibility is widely accepted and could therefore build the basis for a burden/responsibility-sharing mechanism). It is therefore suggested that the scope of the new instrument extends to all 'environmental refugees' and 'environmental flight situations', but to differentiate on the level of obligations of third States between natural and man-made changes in the environment. This differentiation is necessary in order to increase political acceptability, as a lack of distinction would lead to the establishment of obligations also for cases of *force majeur*.

In cases of natural (not man-made) 'environmental flight situations', obligations could be established only for the State of origin.

Within the group of man-made 'environmental flight situations', climate change-related flight situations constitute the majority of cases. In these cases, obligations could be established for the international

The international community is obliged under international human rights law to assist the country of origin, if the latter is not in a position to satisfy minimum standards of basic needs of the population. However, it seems difficult to convince certain third States of their obligation on this basis; further, support would come only at a stage when ,environmental refugees' are already ,under way'.

community or in cases in which third countries which are most responsible can be identified for specific third countries. In order to differentiate between provider-countries and recipient-countries, the instrument could include criteria such as *per capita* greenhouse gas emissions and *per capita* income (gross domestic product), degree of development or region. Furthermore, the formation of case groups of environmental changes (depending on how close the link to climate change is) could be an important element in a new instrument (e.g. differentiation between sea level rise as a direct consequence of climate change, extreme weather events that only partially relate to climate change, as well as drought and water shortages). Depending on which case group the occurrence of an environmental change belongs to, different legal consequences might be triggered.

In cases of other man-made 'environmental flight situations' (especially industrial accidents), the identity of the polluter is usually clear (in contrast to environmental change due to climate change) which means that proof of causation poses less of a problem, legal norms which particularly govern compensation already exist (e.g. strict liability regime for industrial accidents). These cases will be covered by the scope of the new instrument, but the burden/responsibility-sharing will usually be unproblematic due to this clarity with respect to the origin of the environmental change.

Implementation

For the purposes of **implementation** of a binding and comprehensive instrument, an **international coordination mechanism** (Cluster Approach) seems suitable. Each field (e.g prevention, rehabilitation, resettlement) would be under the control of a leading agency, and the establishment of a coordination-secretariat to facilitate coordination between the actors would be suggested.

Enforcement

With regard to the **enforcement** of a binding comprehensive instrument, an **individual** enforcement mechanism (in relation to the individual rights with 'self-executing nature' granted in the instrument) is desirable. It has to be discussed whether such a mechanism should include the possibility for individuals to turn directly against a third State (e.g. in connection with the right to humanitarian aid); while desirable with regard to the best possible protection of individuals, this would constitute an innovation in international law and would require new adequate structures to be established (e.g. an institution to which an individual could submit an individual complaint against a state). Rules regarding the proof of causality between an alleged cause (possibly taking account of the precautionary principle and the shift in the burden of proof) and damage would be necessary, and respective contractual rights would need to be formulated in the form of self-executing obligations of the State vis-à-vis individuals.

Furthermore, an **inter-State sanction mechanism** could form part of an enforcement system - in particular, in case a third State does not comply with its burden/responsibility-sharing obligation. Such a sanction mechanism could be established or derived from general international law, and envisages special

reactions to non-compliance. In many cases, however, the public statement of wrongful behaviour already suffices to make States change their behaviour.

In general, an enforcement mechanism in the form of a judicial review mechanism could bring about legally binding decisions and state compensation claims. However, in view of the reluctance of States to accept obligatory international jurisdiction, it is questionable whether such a judicial organ would be approved. In addition, a political supervisory organ, which is competent to monitor the implementation of the decisions could be envisaged.

Financing

In order to finance the suggested contents, a **fund** is to be established. This fund could receive its resources from third States (in fulfilment of their burden-/responsibility-sharing obligations), from taxes on 'emission intensive' activities or from a liability regime for private actors. The fund should be sub-divided in 'sub-funds', e.g. a sub-fund for adaptation, for resettlement, for disaster relief, for compensation for individuals concerned, as well as an equalising fund for internal burden-sharing. Third States with concerns regarding high costs in connection with burden/responsibility sharing can be convinced of the necessity of proactive preventive measures by pointing to security risks and the opportunity to avoid high consequential costs. Both arguments would also speak against an instrument dealing exclusively with reception obligations.