

Land Conversion Out of Control – How to Achieve Better Governance

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SUMMARY

Not only in developed countries, but also in threshold and developing countries, the development process happens with a lack of control. More and more farmland is lost, and land is used in an unsustainable way. Often a legal framework exists, but compliance is poor. In order to achieve better control over land conversion, a more sophisticated planning system and more laws is not enough. Land owners pursue their individual goals, which do not necessarily comply with the intentions of the planners. Using the examples of Germany and Cambodia, we intend to demonstrate that – despite all differences in institutions and governance – the lack of control follows similar patterns in both developed and developing countries:

The process of land use change is often actively driven by some strong and well organized beneficiaries, which try to reap a higher land rent or an incremental value. The costs of conversion is externalized to a large extent, e.g. to poorly organized groups or to society as a whole. In order to avoid the problems of such externalities, we suggest a better coupling of benefits and costs. If society bears a great deal of the costs of land conversion, it should also participate in the benefits. Specifically, certain property rights of land owners, based on land rent and land value (“*ius abutendi*” and “*usus fructus*”), should be diluted, e.g. by a suitable property tax on land. At present, (local) governments’ revenues depend heavily on land use changes. This means that local governments cannot be considered as neutral actors either. Sometimes there is also a close collusion of local governments with powerful economic interests. In order to make the local governments more neutral actors in land use policy, they should not be direct beneficiaries from land use changes. Instead, the revenues from land taxation should be integrated into a financial equalization scheme and redistributed to the municipalities (e.g. according to the number of citizens).

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1. THE PROBLEM OF UNCONTROLLED LAND CONVERSION

Land conversion can have different faces. Farmland may be converted into land for settlement and traffic purposes, forest may be changed into agricultural land or small-size farming may be changed into large-scale agro-industrial farming. In many cases, land conversion is not carried out in a sustainable way. We wish to illustrate the problem focusing on two kinds of land use changes:

- Conversion of agricultural land into construction land, using Germany as an example (as a highly industrialized country) and
- Changing small-size farming into large-size agro-industrial plantations in Cambodia, which is one of the least developed countries in the world.

At first glance, the situation in Germany and Cambodia seems to be quite different. Nevertheless, in both countries the land is not used in a sustainable way:

- Germany has a legal basis for a sophisticated spatial planning system (Germany: e.g. the Federal Planning Act – Raumordnungsgesetz and Federal Building Code – Baugesetzbuch). However, the average growth of areas used for settlements and traffic in Germany was between 113 ha per day (2003-2006) and 129 ha per day (1997-2000) (German Federal Parliament, 2008). The largest portion of converted land was farmland. The German government wants to reduce daily conversion to 30 ha per day by 2020 (German Federal Parliament, 2007). To date, these efforts have essentially been unsuccessful.
- In Cambodia, a spatial and land use planning system is only in place in some municipalities and districts, but not for the whole country (MLMUPC, 2009). To date, planning is based on a bottom-up approach. In particular, there is a lack of planning on the regional and central levels. Nevertheless, land use changes are also legally regulated: Land can only be used for private purposes if it is converted beforehand from so-called “state public land” into “state private land”. Areas that are protected, e.g. by the forest protection law, cannot be converted. State private land can be used for agro-industrial purposes by granting so-called “Economic land concessions” (ELC, created with the Land Law in 2001 and Sub-Decree No. 146 in 2005) to domestic companies as well as to foreign firms. ELCs are long-term land leases which are granted for land for agro-industrial (or other economic) exploitation (Art. 49 Cambodian Land Law 2001). Despite the fact that ELCs are leases, similar problems appear as with full property titles. In many cases, the owners of ELCs have more than the allowed maximum of 10,000 hectares (MAFF, 2009). Although a total of 2.1 million ha of Cambodia’s agricultural land (5.4 million hectares, of which 3.8 million hectares are arable) is under-utilized (Supreme National Economic Council, 2007), an estimated 46% of rural households are landless or land-poor (that is, own less than 0.5 hectares) (World Bank, 2007). The lack of access to land is a current issue in land conflicts. ELCs in particular reduce the effective supply of land in Cambodia. If they are

used, large monoculture plantations endanger biodiversity and contribute to soil erosion, which is also a problem for Cambodia (Hansen / Top, 2006; Eswaran / Lal / Reich, 2005). In the long run there may also be impacts on food security.

Although the problems seem to be quite different in Germany and Cambodia, we wish to illustrate subsequently some important common patterns.

2. THE ROLE OF EXTERNAL EFFECTS

From an overall economic point of view, land use changes only make sense as long as the marginal social benefits exceed the marginal social costs of land conversion. Social benefits and social costs comprise private and external benefits and costs. Hence, from an economic viewpoint, not only the private benefits and costs have to be considered; instead all benefits and costs have to be taken into account. The main issue of concern relates to the external costs.

2.1 (Private) benefits of land conversion

On the basis of Ricardo's "capitalization formula", the value of land "V" can be explained by the discounted land rent: $V = R/i$, where "R" is the annual rent and "i" the discount rate (in a more complex explanation, we also need to add the value of flexibility of an unimproved site in order to obtain an "extended present value", as the real-option approach does, cf. Holland et al., 2000). The land rent can be explained as a "differential rent", which is a function of location (v. Thünen, 1826), the quality of the land (Ricardo, 1817 / 2004) and differences in the intensity of cultivation or use. Hence, rents on unimproved land are normally not based on labour input. The theories mentioned were originally created for agricultural land, but they can be applied to any kind of land if certain modifications are made. The most important realization for our purpose is that land use changes usually go hand in hand with higher land rents and an incremental value. Any "R" is much higher for construction land (settlements, industrial areas etc.) than for agricultural land and – at least in developing countries – is often also higher for commercial production (cash crops, often for exports) than for breeding food crops for subsistence or local markets.

Most of the benefits of land use changes (higher land rent, incremental value) are reaped privately (in other countries also by local governments):

- In Germany, farmers benefit from farmland conversion as the owners of the sites. The value of the converted land may easily be 20-50 times as high as the value of farmland (Tan et al., 2009). In case of success, a farmer could become a millionaire overnight.
- We see similar patterns in Cambodia, but on higher political levels: 36 of the ELCs larger than 1,000 hectares have been allotted to foreign enterprises of prominent politicians or powerful businessmen (United Nations, 2007). The royalties for ELCs are based on the output, but most of the concession land is unused (Supreme National Economic Council, 2007). Thus, the leasehold fees are extremely low (between 0 US \$ and 10 US \$ per year).

Furthermore, the ELC holders often get tax holidays during the first three years (Interview with Tep Makaty, GTZ consultant, Phnom Penh).

Not only farmers, developers or agro-business companies take private benefits, (local) officials are also involved: They are pursuing their own interests, e.g. a promotion or simply job security. In Western democracies the local leaders will not be re-elected in the event of poor economic performance indicators. In Cambodia, corruption is also a major problem. Considering the benefits involved, we get an idea of who the beneficiaries of land conversion are, namely developers, enterprises and (local) governments represent powerful and well-organized interests, acting in close collusion with common interests. These powerful actors share the incremental value they have generated by converting the land.

On the other hand, external benefits of land use changes also have to be taken into account. Private investments may create jobs and increase the income of the people and the state. The private provision of infrastructure as a precondition for economic development is particularly important if the state is too weak or unwilling to do this. Hence, the Royal Government of Cambodia (RGC) encourages agro-industrial investors to use ELCs (RGC, 2008). However, an assessment of such external effects is always difficult, as the extent of external benefits may differ from case to case.

2.2 (Externalized) costs of land conversion

Most countries have regulations to shift at least a part of the direct costs of land use changes to private beneficiaries. In Germany, people have to pay contributions for land improvements, e.g. for new streets or street repair. In many cases, developers and investors are also requested to participate in the costs of conversion: They use a part of the increased land rent or incremental value in order to cover costs, e.g. for planning, servicing (infrastructure) and selling. This holds for developing rural to urban land in Germany as well as for developing infrastructure connected with agro-industrial investments in Cambodia (“Private Participation in Infrastructure”, PPI, cf. Cambodia-GPSF 2009):

- Nevertheless, at least for Germany there is evidence that such contributions only cover a fraction of the costs of the technical and social infrastructure (Federal Office for Building and Regional Planning Germany, 2006). For example, if a new school or a new hospital has to be built due to a new settlement, in most cases the local authorities are responsible.
- The RGC supports partnership between smallholders (with so-called “social land concessions” and ELC holders), pursuing the “Rectangular Strategy” (Sen, 2009). According to this strategy, private investors should also provide some infrastructure and other external benefits. However, regarding the cooperation between private investors and government, there is a lack of transparency. Basically, infrastructure is a public asset and the provision of infrastructure is a task for the public sector. However, government officials should not drive the trucks; they can use private agents in order to develop the land. Nonetheless, public assets should be financed out of taxes. If private investors carry out the development as an agent of the government, they should be compensated in a fair way. Due to the antagonism of interests, it is very important that the rules of compensation

are clear and open in order to grant transparency. Getting fair compensation is not the same as a license for rent seeking – as ELCs are in practice in Cambodia. In general, ELC contracts connected with PPI lack transparency and the compliance of the contracts is not sufficiently monitored (United Nations, 2007).

Not only the direct costs of land use changes should be considered; instead, more attention should be given to the opportunity costs of planning. Private investment decisions are considered efficient because private investors normally take opportunity costs into account. For example, in a net present value calculation, the discount rate serves as such an opportunity cost rate. Hence, the investor always compares the performance of the intended investment with the performance of the next-best investment alternative. However, not only private investments but also planning decisions cause opportunity costs. If the land use plan favours a certain use (e.g. settlement), other uses cannot be realized (e.g. commerce or agriculture). Almost all uses of land compete with each other and are associated with opportunity costs. Whereas private investors reap a great deal of the benefits of land use changes (incremental value, higher land rent), they do not have to take any opportunity costs into account. Instead, the opportunity costs are externalized. Also the external costs due to degradation of the environment, the loss of biodiversity etc. can be interpreted as opportunity costs (lost benefits from the environment). Such externalized costs of planning are for example in

- Germany: Issues such as ecological degradation, rising infrastructure costs due to urban sprawl, and the problem of providing a minimum supply infrastructure for elderly people or children in remote areas (Köck et al., 2008). Hence, the amicable cooperation between local governments, farmers and developers does not create a win-win situation.
- Cambodia: ELCs are connected with land concentration, land disputes, evictions, resettlements etc. Agro-industrial farming, based on ELCs, is often carried out using monocultures (Hansen / Top, 2006). Soil degradation may be a consequence with impacts also on food security (Eswaran / Lal / Reich, 2005).

In general there is a lack of transparency concerning the total amount of such and other kinds of externalized costs.

To whom are the costs shifted? Who bears the costs of land use changes? The larger a group, the more difficult it is to organize and protect its interests (Olson, 1968). Hence, a major part of the social costs of land use change is shifted to poorly organized groups, which lack bargaining power. This holds true for Germany as for Cambodia. The society as a whole is the most poorly organized group, and most difficult to organize. Hence, external costs are often shifted to society – also in Western democracies, where political parties (as the name suggests) represent only particular interests, but not the interest of society as a whole.

2.3 Conclusion: Decoupling of costs and benefits of land conversion

We conclude that the winners of land use changes (higher land rent, incremental value) are mostly small and well-organized groups that work in close collusion with the (local) government in order to participate in the incremental value. The costs are shifted to weakly

organized groups or to society as a whole. Furthermore, there is a lack of transparency concerning the total amount of the externalized costs. Hence, land use policy suffers from a general decoupling of marginal benefits and marginal costs of land use changes.

Today's marginal benefits and marginal costs	Private investors	Public / state
- Benefits	Privatization of land rent and incremental value	Limited public participation, different intensity
- Costs	Bearing only a fraction of direct infrastructure costs	Mainly opportunity costs, indirect infrastructure costs etc.
Consequences:	Externalities and pressure to convert even more farmland	

Table 1: Decoupling of the marginal costs and marginal benefits of land use changes

The externalization of costs of land use changes has consequences for the way in which land use planning is carried out. Planning is needed because the strategic behaviour of private actors will not bring their unregulated actions to an optimal outcome for society. Planning has to balance the competing claims of the various stakeholders in order to optimize the common good. Hence, good land use plans need a neutral planning process. However, in practice the planning process is anything but neutral. The decoupling of benefits and costs is like an invitation to the beneficiaries for a free lunch. Lobbying and pressure on the authorities to push land use changes are supported. Corruption is considered a major problem – not only in developing countries. In an overview of the Global Corruption Barometer, land services are ranked No. 3 in the corruption scale (Transparency International, 2009). Although Germany is considered a democracy with strong legal power enforcement, whereas the Cambodian state is considered weak, in both countries some strong actors try to “capture” officials. In order to reap land rents and incremental value, they are lobbying and manipulating them by legal (participation process!) and illegal means. A “captured” (local) government is no longer a neutral trustee of the common good.

2.4 The role of government: Neutrality and sustainability of land use planning?

Furthermore, the governments are not neutral actors, because they have strong political and financial incentives to tolerate or even to promote unsustainable land use:

- Germany has a sophisticated spatial planning system. German municipalities are crucial in implementing the higher-level plans; at the same time they enjoy a high degree of political autonomy (cf. Art. 28 of the constitution). In fact, the leaders of the local governments do not primarily pursue an optimizing of the common good, but of the individual benefits. Local governments try to attract new inhabitants or industry by converting land – in order to get more revenues by taxation or the financial equalization scheme. A successful attraction of inhabitants or commerce serves as a performance indicator. In Germany, the municipality's right to take the property tax on land is fixed in the constitution. Hence, there is a lack of compliance with the regional planning.

- For ELCs in Cambodia, the situation is different: Applications for ELCs have to be approved at central state level by the Ministry of Agriculture, Forestry and Fisheries (MAFF). From September 2008 on, only the MAFF has the authority to grant ELCs of any size. Provincial or local authorities are no longer involved in the application process (Sub-Decree No. 131 on the Modification of the Sub-Decree on Economic Land Concessions, Article 1). Despite the strong position of the central state there is often a lack of a regulatory framework for land use planning and of enforcement. As described above, ELCs are the main legal instruments for investments in agro-business. Sub-Decree No. 146 on ELCs (Art. 4 and 5) stipulates that environmental and social impact assessments have to be completed in accordance with the land use planning, and that public consultations have to be conducted with local authorities (e.g. Commune Councils) before starting the ELC project. However, ELCs can also be granted through “unsolicited proposals” where the investor itself proposes the demand for the project including planning and construction materials due to a lack of land use planning documents and authorities’ capacities to follow the requirements mentioned in Sub-Decree No. 146 (Interview with Robert Deutsch, GTZ consultant, Phnom Penh). Thus, private investors, pursuing their own interests, often fill the gap of absent regulative and financial power of the state. Besides, the procedure, which is described in the sub-decree for ELCs, is often violated. For example, Social Impact Assessments and Public Consultations are simply not carried out (United Nations, 2007). Generally, there is a lack of control of the activities of private investors by the RGC (UN, 2007). However, the RGC promotes the use of ELCs, hoping that the firms will develop remote areas by supplying infrastructure and create tax revenues in the future (RGC, 2008).

Hence, in both countries there is a lack of compliance. In both cases governments cannot be considered as neutral actors in the planning process because they depend on the revenues of land conversion.

3. THE USUAL REMEDY: A GREAT DEAL OF RED TAPE

On the one hand, the state is not a neutral actor, and on the other hand officials normally try to keep a minimum of control over the conversion process by setting regulations in place.

Basically, regulation of land use is necessary because individual decision-making by private actors normally does not lead to an optimal outcome for society. This is also an important result of game theory, particularly the discussion about Nash equilibrium. It is not only rent seeking that can counteract the planners’ ideas. Blockades and unwillingness to cooperate on the part of the owners also pose severe problems. Hence, governmental regulation is required in order to bring the private-sector actors actions in line with the plans and the intention of the law, i.e. to define good land use policy. From an economic viewpoint, regulations are nothing else than a dilution of the private-sector actor’s property rights on land.

Table 2 indicates that good land use policy is not compatible with a full bundle of property rights. A completely privatized ownership title may be interpreted from an economic

viewpoint as holding all four sets of the rights mentioned below (cf. Pejovich, 1990; the following classification is derived from Roman law):

Exclusive rights, based on value and rent	... control and use
Asset (stock)	Right to sell the asset and to participate in its value (disposal, Latin: “ ius abutendi ”)	Right to control and to change the asset according to one’s needs (Latin: “ abusus ”)
Utility (flow)	Right to appropriate any returns on the asset (Latin: “ usus fructus ”)	Right to use the asset (Latin: “ usus ”)
Controlling of the behaviour of the private investors:	Alternative way: Negative economic incentives, such as taxation or leasehold	Traditional way: Regulations
Consequence:	Dilution of the rights due to value and rent	Dilution of the rights due to control and use

Table 2: Dilution of property rights (from an economic point of view)

The dilution may refer either to property rights based on value and rent or to property rights based on control and use. However, the traditional way of regulation is to introduce a great deal of red tape and to dilute the property rights based on control and use through public law (cf. Dieterich, 2001). This is the way of thinking of administration officers; besides, this kind of regulation activities causes less political resistance than touching the rights based on value and rent to the private sectors’ actors. On the other hand, this policy indicates bad governance:

- For example in Germany a real monster of public bureaucracy is hampering the economic activities of private investors; the regulations also impact on “usus” and “abusus”. Hence, from an economic point of view the so-called “full ownership title” is anything but full. In Germany, authorization of investments is a complicated procedure that takes a lot of time. Construction law is a complicated issue. The risk for architects of being sued due to a violation of construction law is considered very high (Pabst, 2006). However, this monster of bureaucracy cannot achieve its goals as long as there is a strong counteracting force based on the decoupling of benefits and costs of land use change.
- Indeed, it is also difficult to find best-practice examples for good land use policy in other countries. Instead, we see bad practice and worse practice. Cambodia gets assistance from Western states in order to achieve good governance practices. However, in many cases, this assistance is nothing more than a ‘copy and paste’ of its own bad governance regime. In particular, the basic idea of achieving good governance by strengthening the whole bundle of property rights (table 2) is misleading. In order to achieve effective regulation, either property rights based on value and rent or property rights based on control and used have to be diluted.

However, the state cannot win the race against the private-sector actors by simply introducing such a great deal of red tape. Private actors always find ways to circumvent regulations and to

counteract the government's intentions. Hence, the alternative and better way would be to release regulations and to install negative economic incentives, such as a suitable property tax or a suitable leasehold system. From a regulatory policy viewpoint, these economic incentives should indeed be negative: Land owners and (local) governments should not be rewarded for not damaging society; instead they should be punished if they cause damage (costs-by-cause principle). Otherwise, the price for good land use policy is unaffordable and the fundamental problem of the decoupling of benefits and costs of land use changes cannot be solved.

With a suitable framework of economic incentives it should be possible to release such regulatory constraints that weaken the rights based on control and use (table 2). Nevertheless, as mentioned, negative economic incentives are also a dilution of property rights. However, in contrast to the introduction of a monster of bureaucracy, the dilution refers not to the user rights but to "ius abutendi" and "usus fructus". Particularly, there is no negative impact on tenure security. By diluting these rights with a suitable framework of negative economic incentives, the targets of planning could be achieved more effectively, compared with creating a great deal of red tape: Better plans and better compliance might be achieved. However, the big question is how exactly such a framework can be put in place.

4. GETTING BETTER GOVERNANCE: COUPLING OF BENEFITS AND COSTS

4.1 Taking away rent-seeking incentives of private actors

Considering the pressure private investors exert on authorities in order to achieve land use changes, institutions have to be created to counteract the damaging externalization phenomena. The benefits from land use changes should be coupled with the costs.

- One way to achieve this would be trying to assess the externalized costs and to internalize them, e.g. by taxation. However, the assessment of externalities is difficult, expensive and always a source of debate.
- There is another solution that is more practicable and easier to justify: Land rents emerge due to activities of the state (planning, infrastructure supply etc.), and the public bears a huge part of the costs of land use changes. Thus the private reaping of land rents can hardly be justified. Instead, the lion's share of the benefits should be allotted to the public. This could be achieved by suitable property taxation (or a sensible leasehold system).

The structure of such a tax would not be the same as in an internalization approach: The aim of the tax would be the transfer of a great deal of the land rent from the private-sector actors to the public / state and not the internalization of external costs. The idea of a tax in order to skim off the land rent was promoted intensively by Henry George (1879). Long before, David Ricardo (1817) thought about skimming off the land rent with a tax.

Basically, the tax base can be compound (e.g. to put the tax on the value of land plus the value of the building) or isolated (e.g. to put the tax only on the value of unimproved land, without fixtures, buildings etc.). A lot of land use management experts agree that only unimproved land as a tax base (even if the land is improved) supports land use policy, because a compound tax base discourages efficient land use: The better the use of a site (by building and

other fixtures) and the higher the resource efficiency, the higher the tax. Furthermore, a compound tax base should always change if the improvements are modified. Hence, the improvements should have to be constantly monitored and registered, which causes high costs. A compound tax base is also difficult to justify: By taxing buildings and fixtures, a compound tax base charges the efforts of the owners of improving the land. Instead, a tax on unimproved land only takes away parts of the land rent, which is not determined by efforts of the owners, but by actions of the public. Nevertheless, in

- Germany the property tax on land is based on a compound tax base. The assessment of the tax base requires a lot of manpower and resources. The level and structure of the tax base are generally considered to be completely wrong. The tax base is considered to violate the equity principle of the German constitution (Löhr, 2008, cf. German Federal Constitutional Court, 2006);
- Cambodia the Canadian land assessment team apparently supports the RGC introducing a compound tax base, which is more or less a ‘copy and paste’ of the poor example of most Western states (E.g. Robert Fournier’s report No I following the mission & seminars in Phnom Penh from 10-17 December 2007).

For these and other reasons, we suggest following an old proposal and supporting a tax on the value of unimproved land. Before we are able to judge the effects of a site value tax, we must take a look at the formula. We have to take into account that the value of land as a tax base is reduced by the tax itself. Hence the formula is:

$$V = \frac{R}{i+t}$$

where “R” is the *possible* land rent (before taxation), *not* considering the *actual* land use (the possible land rent also has to be paid if land is used in an inefficient way). “i” is the real interest rate (deflated) and “t” is the tax rate. The tax rate on unimproved land should be fixed, the tax should be charged without regard to the actual land use. Using this structure, the tax has the character of a fixed cost. Hence, the land owner cannot avoid the tax or shift it to the tenant. The only way to lower the effective tax burden is to use the site efficiently, according to the plan. Interestingly, not only land reformers but also liberal economists such as Milton Friedman supported such a tax on unimproved land (Mankiw / Taylor, 2000).

The proposed fixed tax rate on the value of unimproved land leads to more neutrality of planning decisions: If parts of the land rent are skimmed off by a tax that cannot be shifted, the economic value of land for private sector will decrease. Also the incremental value due to land use changes will be lower. Such a tax pops land price bubbles and prevents speculation.

In order to avoid a misunderstanding: Although such a tax on unimproved land is skimming off a part of the land rent, the land rent itself cannot and should not be abolished. The land rent is an important allocation force, which regulates the use of the land (Pfannschmidt, 1990). High land rents cause (opportunity) costs, that normally only valuable investments can cover. The proposed tax does not abolish the land rent, but tries to achieve a better coupling of benefits and costs of land use (changes) by changing the allocation of the land rent. However,

a complete coupling of benefits and costs can only be achieved by a reallocation of the whole land rent. By analyzing the formula above we can easily see that the land rent cannot be skimmed off completely by such a tax, even if the tax rate were very high (the land rent could only be skimmed off completely by means of a sensible leasehold system). Hence, the proposed tax has only a limited capacity to support good land use policy.

In Germany, despite a lot of shortcomings in the real estate market, this limited capacity may be of limited significance compared with other countries: The prices of property are comparatively stable due to a unique system of financing real estate investments (GIF e.V., 2009). In Cambodia, the situation is quite different: In the past (2004 – 2008), a land bubble emerged in the cities as well as in rural areas, mainly due to a rollout of urban capital. For example, in Puok district (Khnat and Tuek Vil) the land price was reported to have increased from 1,000 – 3,000 US \$ / ha pre 2004 to 50,000 US \$ / ha in 2008 – roughly a 25 times mark-up in 5 years (interview with Tep Makathy, GTZ consultant, and Dieter Billmeier, vice president of Bank Canadia Plc, Phnom Penh). After the 2008 elections, the land prices were falling to the level of 2007. Experts predict that the land prices will climb again after 2011 (interview with Po Eavkong, Bonnarealty group and Engkry Cheang, Cambodia Real Estate Co. Ltd.). In order to prevent investments for speculative reasons, a tax on unused land was introduced. This tax was charged at 2% of the value of land, assessed by the so-called “land committees” (IMF, 2009). However, the tax had little effect. Firstly, there were a lot of disputes regarding whether or not the land was being used. Secondly, considering the hike in land prices mentioned above, a tax of 2% is not enough even if the tax base were suitable.

In light of such high price hikes and the limited capacity of a fixed tax on the value of unimproved land, the tax on the value of unimproved land should be complemented by a tax on the incremental value. This tax should not be integrated into the income tax system, but should instead have the character of an impersonal tax (cf. also World Bank, 2009). Such a tax on the incremental value should only be levied when a plot is sold. Otherwise the owner could get short of cash – the acceptance of the tax could suffer. In order to prevent cheating, an independent assessment should calculate a minimum tax base (possibly with a discount of 20% of the market value). Otherwise the price paid will differ from the price that is reported to the tax authorities.

A comparable approach was already used in Qingdao in 1898 (Warner, 1999). The system was set up during the colonial era by a German administration officer named Schrameier, who between 1924 and 1925 was also an advisor to Sun Yatsen. If such a system could be introduced before 1900, developing countries should also be able to do the same today. On the other hand, in many threshold and developing countries (such as Cambodia) there is no operational legal cadastre and assessment regime yet. Certainly, building the capacities and institutions as well as a proper land assessment is necessary. Such a tax cannot be introduced from one day to the next. Nevertheless, even in the absence of a legal cadastre, local authorities could install a fiscal cadastre in order to identify and value a plot of land and post a public notice that that particular piece of land owed a given amount of tax. If no-one steps forward to pay the tax, the government could seize it (Perkins, 2009).

4.2 Tax assignment: Making local governments neutral actors

Subsequently, we wish to dispute the widespread opinion that property tax on land is a “born” municipal tax. In Germany, the municipality’s right to take the property tax on land is fixed in the constitution (Art. 106). In Cambodia, capacity building in the communes (municipalities) is promoted in order to strengthen their role in a working land use planning system. At the same time, Western advisors make proposals for an allocation of the property tax on land to the communes. In our point of view, this idea is as misleading as it is widespread. It may cause bad governance. If the municipalities play an important role in land use planning while depending at the same time on financial resources out of land use changes (tax revenues or money from a financial equalization scheme), local governments can no longer be expected to be neutral actors and neutral trustees of the common good. Instead, there is a current temptation to increase the revenues by promoting land development and land conversion. The solution for this regulation problem should be basically the same as proposed for private-sector actors: Local governments should not be *direct* beneficiaries of land use changes.

In order to make local governments more neutral, the money raised by land use changes should be integrated into a financial equalization scheme. The funds should be transferred to a higher administrative level and pooled there. Finally, the money could be redistributed to the local governments according to the size of the local population if possible. Unproductive competition between the municipalities (for inhabitants and industry, as is very common among German municipalities) would be lowered. Farmland conversion would no longer provide any direct financial benefits to the local governments. On the other hand, local governments would still have incentives to care for the attractiveness of their townships in order to attract more people (and so get a higher share of revenues) and to achieve political promotion. Nevertheless, the local governments as a whole would have as much revenues as before; they would neither win nor lose anything. Local governments would also participate in the land rent, but in an indirect way.

5. FURTHER EFFECTS ON LAND USE POLICY

Above we described how a better coupling of benefits and costs by means of a suitable economic framework could make land use policy more neutral. Furthermore, by introducing the proposed tax structure, better compliance with the plans could be achieved. The tax is charged on the value of unimproved land. The value of unimproved land emerges according to the yields that can be earned with the best possible use of the land. Hence, the tax should be not paid according to the actual use, but the best possible use. This means that if owners use the land in an inefficient way, they bear the costs of the lack of efficiency. An inefficient use of plots is a waste of money. The owner has always to ensure that the site is used efficiently, within the limits set forth in the guidelines of the planners. According to an appraisal of the Bavarian Ministry for Man and the Environment (2003, Germany), 36% of the potential sites in Bavarian municipalities are left underused or unused. In Cambodia, only some 10% of the granted ELCs are in use (World Bank, 2007; MAFF, 2009). Many ELCs are held only for

speculative reasons (Supreme National Economic Council, 2007). In both countries, people and firms claim for land that they do not really need – while on the other hand, people and firms that need the land do not have access. The proposed economic framework would create pressure to use the sites more efficiently. Because of the costs of the tax, nobody will claim more land than they really need. Ongoing tax payments create a certain pressure to offer properties on the market. Generally, the tax will mobilize the market, as it will guarantee a large supply of plots. Thus, especially enterprises no longer feel any need to hoard “reserve plots”, because this would only cost money, while the market currently is able to meet the demand for available sites. Speculation would no longer be rewarded. As mentioned above, the prices for land will also decrease. This makes it easier for firms and households with weak budgets to act in line with the ideas of the planners. Nevertheless, policy makers should think about making exemptions from the tax available for small-scale farmers in order to protect them and to achieve a higher acceptance. If the tax payments are redistributed in a financial equalization scheme and the inhabitants benefit (e.g. by lower municipal tax payments or better provision of infrastructure), the distribution effects are even stronger. Even more positive effects could be discussed. However, it is difficult to give evidence by mentioning best practice. Real policy shows mostly bad and worse practice. Nevertheless, Dieterich (2004) describes the positive experience Denmark made with a tax on the value of unimproved land (before the tax freeze in 2001, cf. Dieterich, 2004 and Erlandsen et al., 2006).

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