3.3. Urban planning in the context of environmental governance: actors, conflicts, effectiveness

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Taking the city of Krasnoyarsk in Russia as a case study, this chapter provides an example of an environmental policy analysis in the context of spatial planning. In particular, the chapter explores such analytical tools as *STEEPL-* and *SWOT-analysis*, identification and analysis of *stakeholder groups* and mapping of the actors involved in spatial planning. The chapter contents and all the examples are taken from a research done in the city of Krasnoyarsk in 2013 and follow-ups from 2014–2015.

3.3.1. Historical background and legacies

In the course of its history, the city of Krasnoyarsk performed a variety of socio-economic functions in Russia and Soviet Union, and each of its "functional phases" was leaving series of impacts on spatial planning and institutions responsible for city development. In terms of the phases and the governance institutions, the history of Krasnoyarsk can be divided into 4 periods:

(1) Krasnoyarsk City as a fortress on the outskirts of Moscow Tsardom. City was founded in 1628 "on the frontier" as a military outpost between forest and steppe zones (Tsarev, 2002). In the first half of the 18th century, the city was a wooden fortress with 800–2500 inhabitants and some 200–350 houses (KrasSU Internet Center, 2008). The city functions included the protection of the surroundings, trade with indigenous people and nomads, and maintenance of the flow of goods from and to the "metropolis". The fortress of Krasnoyarsk was eventually burned down in 1773. In the cityscape this period is reminded by the Church of the Intercession, which is the oldest stone building in the city (Tsarev, 2002).

(2) Krasnoyarsk as the capital of Yenisei Province in the Russian Empire. Krasnoyarsk became the administrative centre of the province in 1822. The mid-19th century was marked in Eastern Siberia by the "gold rush". It was then that the public infrastructure started to emerge (e. g. wooden pavements, pavilions in Chinese

style, fountains); in parallel, commercial and public (theatres, casinos, etc.) housing was built, and the first Master Plan was developed following the Saint-Petersburg model, i. e. regular spatial planning (Tsarev, 2002). Trans-Siberian railway had reached the city in 1895, and became its ultimate connection with the European part of Russia. New city functions therefore included: support to railway maintenance as well as cargo and passenger services, controlling trade and resource extraction over the huge area, keeping the flow of goods and money to the "metropolis", and supporting administrative management and control over the territory. Major footprint of this time is spatial planning structure in the city center and in the historical "core" of the city.

(3) *Krasnoyarsk City as a Soviet Union "city-factory"*. Following the outbreak of the World War II, 23 industrial enterprises from the European part of the USSR were relocated to Krasnoyarsk. Sizeable industrial sites were established in the city on the both sides of Yenisei River (along the Trans-Siberian railway). To provide workers and their families with a place to live, temporary wooden houses were quickly constructed in a close proximity to the industrial areas (Shevchenko, 2005). Later on, utility infrastructure started to develop in these areas as well. Main city functions were, therefore, production of military equipment and management of cargo operations in the interest of the defence. Major footprints this period left on the city are (1) mixed industrial and housing areas in the downtown, (2) a lot of outdated wooden housing, and (3) poorly executed engineering infrastructure, especially on the right bank of the Yenisei.

(4) Krasnoyarsk City as a Soviet Union top-secret megafactory. After World War II, most of industrial enterprises, once moved to Krasnoyarsk, remained there. Most of their production (as well as the production of some newly established enterprises) had to do with the national defence, and as a result, it was not until 1989 that it was allowed for foreigners to visit the city. The present spatial structure was shaped according to the mainstream Soviet city planning — the city was divided into so called "industrial villages" (Chief City Architect, interview) consisting of a major industrial site and housing areas around it (i.e. mono-functional zoning). This resulted in high levels of environmental pollution in many residential areas. Main city functions included controlling and supporting largescale projects of natural resource extraction in the region, providing the flow of resources and industrial goods to other regions of the country, and supporting administrative management and control over Krasnoyarsk Krai. This period left the following footprints in present city planning structure: (1) "friable" and low-density spatial structure, (2) underdeveloped social infrastructure, (3) traffic problems, (4) high levels of environmental pollution, (5) "khrushchyovki" the 5-storey blocks of flats built in the 1960s and 1970s designed as a temporary solution to the acute housing shortage.

3.3.2. Urban sprawl: opportunities and constraints

We used STEEPLE (Bowman, 1998) and SWOT (Humphrey, 2005) methods to analyse the decision-making environment and available spatial planning options. Results are set in the Tables 3.2 and 3.3. Success in the implementation of a city development strategy strongly depends on the ability to solve the problems of environmental quality, social equity, legacies of soviet city planning, as well as on financial flows, lobbying by major business players, and levels of corruption. The risks and threat levels essentially depend on the effectiveness of negotiations between actors, solving conflicts, and finding satisfactory solutions for all the stakeholder groups.

Table 3.2

STEEPL-analysis of urban sprawl in Krasnoyarsk

Social aspects	Technological	Political	Economic	Environmental	Legislative
	aspects	aspects	aspects	aspects	aspects
- positive growth of	- positive growth of - outdated technolo-	- capital of	- investment at-	- high level of air	- sales and leases
population ("devel-	population ("devel- gies and approaches	Krasnoyarsk	tractiveness;	pollution;	of municipal
oping city");	in construction in-	Krai;	- economic	- soil contamination	lands are regulat-
- high employabil-	dustry;	- good relations	growth as the	with oil and point	ed by the Land
ity;	- low level of energy between Krai	between Krai	main goal of city	river pollution;	Code of RF and
- segregation of	efficiency in hous-	and municipal	development;	 municipal solid 	the rules of land
population based	ing sector;	political powers; - huge industrial	- huge industrial	waste;	use and urban
on incomes, social	- old systems of wa-	- political stabil- potential;	potential;	- location of indus-	development of
status, nationality	ter supplying, sew-	ity;	- natural re-	trial enterprises in	Krasnoyarsk City;
and etc.;	erage, heating and	- city self-	sources (includ-	the center of the	 urban develop-
- "boom" of hous-	other infrastructural	governmental	ing energy re-	city, lack of buffer	ment is regulated
ing construction;	elements;	bodies are not a	sources);	zones between in-	by Urban devel-
- underdevelop-	- narrow streets and	part of state	- low costs of	dustries and housing opment Code of	opment Code of
ment of social in-	problems with traf-	government;	energy resources; in the center of	in the center of	RF, rules of for
frastructure;	fic;	 city officials 	- sale and lease of Krasnoyarsk;	Krasnoyarsk;	land use and ur-
- absence of social	- mix of industrial	are accountable	municipal lands,	- poor greenery in	ban development
equity;	and housing built-up to local people,	to local people,	local taxes are	the center of Kras-	in Krasnoyarsk
- growth of social / areas;	areas;	they are elected main financial		noyarsk	City, norms for

ublic involvement	public involvement - a lot of old housing every five years; source for the	every five years;	source for the	urban develop-
n societal process-	in societal process- (baraki, khrushchy results of deci- city budget;	- results of deci-	city budget;	ment of Krasno-
es, active citizen-	ovki, brezhnevki); sion-making		- outflow of fi-	yarsk City, and
ship in regard to	- geomorphological process and		nancial resources	Master plan;
city development;	conditions and relief some legislative (profit of indus-	some legislative	(profit of indus-	- building con-
 corruption 	of the city, the Ye- documents are trial enterprises)	documents are	trial enterprises)	struction and in-
	nisei River	accessible on the to the transna-	to the transna-	frastructure con-
		official web-	tional companies	struction are regu-
		page;	located in Euro-	lated by construc-
		- lobby of trans- pean part of Rus-	pean part of Rus-	tion standards;
		national compa-	sia	- environmental
		nies and oli-		protection in the
		garchs in Krai		city is regulated
		government and		by environmental
		parliament		legislation of RF

SWOT-analysis: constraints and opportunities for urban sprawl in Krasnoyarsk	Weaknesses	 As a soviet industrial city, Krasnoyarsk is characterized by underdevelopment of social infrastructure, limiting city development in future. In spite of the "boom" of housing construction, construction industry often uses outdated technologies and approaches. There is a low level of energy efficiency in housing sector. These issues may decrease adaptiveness and liveability of the housing sector in the future. Main infrastructural elements (systems of water supplying, sewerage, heating system, roads and streets) were built about 30–40 years ago. At present time, these factors have a negative impact on urban planning and development. There are forest parks and city parks in Krasnoyarsk, but the central part of the city does not have a sufficient amount of green areas.
SWOT-analysis: constraints and	Strengths	 Krasnoyarsk is a large industrial center in Siberia with large industrial potential, high investment attractiveness, and different opportunities for employability. City has significant potential for development, increasing of livability and competitiveness. "Boom" of housing construction attracts new residents and gives more opportunities for further development. Local officials are accountable to citizens, results of decision-making process and some legislative documents are accessible from the official web-page. During the last years, a growth of social / public involvement in societal processes, active citizenship in regard to city development could be observed. These factors insure openness and transparency of decision-making process.

Table 3.3

Opportunities 1	Threats
 growing population ("developing – 	segregation of population based on incomes, social status, national-
city");	ity, etc.;
 capital of the region (Krasnoyarsk – 	absence of social equity;
Krai);	mixture of industrial and housing built-up areas;
 good interrelations between Krai 	a lot of old housing (baraki, khrushchyovki, brezhnevki);
and municipal political powers; –	lobby of transnational companies and oligarchs in Krai government
 political stability; 	and parliament;
 city self-government bodies are 	corruption;
not a part of state government; –	sale and rent of municipal lands, local taxes are main financial
 economic growth as the main goal 	source for city budget;
of city development; –	outflow of finance (profit of industrial enterprises) to the transna-
 natural resources (including ener- 	tional companies located in European part of Russia;
gy resources); –	high level of air pollution;
 low costs of energy resources. 	soil contamination with oil and point river pollution;
I	municipal solid wastes;
	location of industrial enterprises in the center of the city, lack of
	buffer zones between industrial and residential areas in the center
	of Krasnoyarsk.

3.3.3. Stakeholders' interactions in urban development

In Russia, there are three decision-making levels in urban development: local (city), regional (*krai* in case of Krasnoyarsk) and federal. At the local level, we have identified such actors as local self-governing bodies, architects and designers, developers and investors, and general public. The regional level of stakeholders includes regional executive and legislative authorities, (the Legislative Assembly and Government of Krasnoyarsk Krai). The federal level in decision-making process consists of: (1) Territorial representations of Federal governmental bodies located in Krasnoyarsk city, but subordinated directly to Moscow offices, (2) Legislative bodies of Russian Federation located outside the Krasnoyarsk Krai. The stakeholder groups operating at all decision-making levels are Business bodies and Non-governmental organizations.

The analysis of the significance of an actor group in the decision-making process was performed using the approach suggested by Mitchell, Agle and Wood (1997). The key concepts they explore in the study are *power*, *legitimacy* and *urgency*. The *power* is the extent to which a party has or can gain access to coercive (physical means), utilitarian (material means) or normative (prestige, esteem and social) means to impose their will. The *legitimacy* is understood as a set of formal established instruments and procedures insuring participation of actor group in city planning and urban development. The *urgency* is defined as the degree to which stakeholder claims call for immediate attention in accordance with declared principles of legislative documents.

Power, legitimacy and urgency are interrelated and the three variables often overlap giving us seven groups of stakeholders:

- *definitive group* enjoys legitimacy in decision-making process, huge power and considerable degree of urgency;

- *dominant group* has legitimacy and power for promoting own interests in urban development;

- *dangerous group* has huge power and urgency, but does not have legitimacy for promoting its goals and interests;

- *dependent group* has legitimacy and large urgency, but does not have enough power for promoting interests;

- *demanding group* has only urgency;
- *discretionary group* has only legitimacy;
- *dormant group* has only power.

Fig. 3.7 illustrates the typology of stakeholder groups, participating in city planning and urban development. Currently, the most influential actor group in urban development is a local authority (*defining group*), architects and planners, as well as developers and investors (*dominant groups*). These groups develop, approve and implement all urban development solutions.

The next level in decision-making process belongs to regional governmental structures as well as non-governmental organizations (*dangerous group*) and public (*dependent group*). A dangerous group does not have a legitimate mechanism to promote own interests, but can block the adoption of projects (e. g. the conflict over construction of Manganese Ferroalloy Plant (Krasnoyarsk Being Against Manganese Ferroalloy Plant, 2011)), at the same time, instrument of conflict resolution at the local level is missing. A dependent group needs someone else (e.g. NGOs) to promote their demands and claims.

The next level is represented by the federal authorities and business bodies unrelated to the construction (*demanding groups*). They have urgency but a little power and legitimacy at the local level to promote own ambitions. *Discretionary group* in Krasnoyarsk is represented by marginalized and vulnerable social strata. They have legitimate right to participate in decision-making process, but do not have power and urgency. *Dormant group* includes e. g. the Architects' Union. Many members of the Union participate in Urban Development Board and can have an influence on urban development policy, but at the same time this group does not have legitimacy and urgency.

Fig. 3.8 illustrates the interactions between stakeholder groups. Development of land use planning documents is the prerogative of local authorities, planners and developers who work closely together (Krasnoyarsk City Statute, 1997; Federal Law № 131-FZ,

2003; Urban Planning Code, 2004). The central figure of urban policy in the city is the Mayor. His leadership and personal qualities strongly influence the procedures and practices of policy implementation, as well as the involvement of all stakeholders in the decisionmaking process.

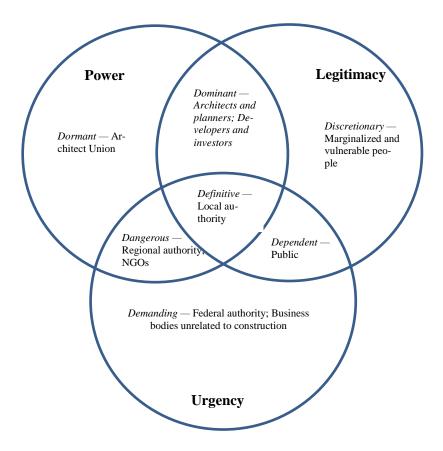


Fig. 3.7. The typology of stakeholder groups participating in the city planning and urban development of Krasnoyarsk city

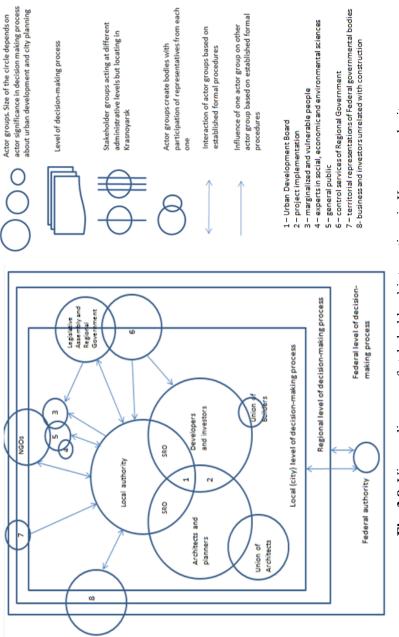


Fig. 3.8. Vienne diagram of stakeholders' interactions in Krasnoyarsk city

Representatives of all the three groups participate in the City Planning Board. List of Board members is established by the City Administration and approved by the Mayor. In accordance with the Statement of the City Planning Board (Krasnoyarsk City Administration, 2013), Board may include architects, builders, local authorities and other professionals whose work is related to the development of the city. Thus, the City Planning Board is a body consisting of city planning professionals, and it does not have a goal to take into account opinions of any other stakeholder groups, such as the lay public. As a result, the Board tends to approve the decisions perceived as right by a rather narrow professional group without proper consideration of the interests of other groups (e. g. the project of Orthodox Cathedral on the Strelka that was well received by the city authorities and the architects, but disliked by nearly everyone else (Zadereev, 2013)).

Functions of city administration bodies often overlap or duplicate in regard to the management of urban development. For example, construction of residential and public buildings is overseen by the Architecture Department (permitting), but also by the Department of Municipal Property and Land Relations. Each administrative body designs its plan for the city development in the relevant field; potentially, this requires involvement of the specialists from other departments, but such practices as exchange of information and involvement of peers are still poorly developed in the city administration bodies.

Designers and developers closely cooperate on their project designs and construction works. Self-regulatory organizations (SROs) were set up for improving cooperation and management in the construction sector (Federal Law N_{2} 315-FZ, 2007). SROs act in the sphere of interaction between professional communities and local authority. Business bodies have shared objectives with local authorities in regard to the implementation of their investment policies. The City administration is also working on improving the city's attractiveness for investors. Investors, at the same time, need land plots, public and administrative buildings, warehouses and engineering infrastructure. Master plan reflects the policy goals of city administration, needs of business and investors communities, requirements of building and construction regulative documents. As observed from 2013 to 2015, the level of participation of non-experts and the public

in the development of urban policies was extremely low. City planning is still essentially an expert-led process. Public is almost excluded from the decision-making and could interact with planners only through mechanisms of public hearings. The latter are ineffective due to poor attendance, while those who attend often are not aware about the purpose, procedure and possible outcomes of hearings. In case of conflicts related to new development plans, poor social infrastructure or shrinking green areas, residents preferred to write individual or collective complaints to the City Administration. Such complaints were processed and considered through the established procedure. In the case of unfavourable outcomes, citizens sometimes joined protest movements. The most successful "Krasnoyarsk Being Against Manganese Ferroalloy Plant" movement has managed to bring together a significant number of citizens, who participated in different types of protest campaigns. Potentially, the locals have also a right to initiate a referendum; however, this instrument had never been used to question planning policies.

The observed informal ways of interaction between actor groups included: lobby of corporative interests in the City Council and City Administration, coalition making between business bodies and local governments, shadow schemes of sale / lease transfer of land plots, and bribes (interviews with locals, representatives of spatial planning office, architects and developers), information campaigns in the mass-media, protest movements, social networks. Such informal procedures and practices apparently led to the development of mistrust between actor groups, as our interviewees suggested.

3.3.4. Institutions of urban development policy

Municipal, regional and federal authorities are key landowners in the city. There are many land plots with unrecognized or disputed property rights, while some of them are shared by the owners from various administrative levels. For example, city park *Berezovaya Roshcha* includes the plots owned by federal, regional and local authorities, as well as plots with mixed property rights. The management of such plots is a challenging task for city planners and municipal authorities. Land market is regulated by the Land Code of Russian Federation (2001). According to its Chapter 30, land plots are allocated to developers through land tenders or auctions. Land tenders were on hold in Krasnoyarsk for a few years, and this procedure was renewed after the new Mayor was elected in 2012. According to the Land Code (2001), provision of land plots without tenders is possible only in a limited number of cases, e. g. conservation and restoration projects, which are governed by direct contracts between a developing company and the City Administration. Nevertheless, this mechanism had been broadly used in recent years, and this triggered speculations in local media and social networks about corruption schemes and lobbying by developers.

The fundamental problem of spatial planning and development in Krasnoyarsk over the centuries can be framed as a "syndrome of a visitor". Apparently, many people settling in the city, including its key decision-makers, had not considered it a place to live, but rather a place to leave. This resulted in many planning compromises (especially where green and public spaces, cultural heritage, walkability were concerned) and low-quality planning and architectural solutions, even if significant investments were involved. Most of such problems are still here, in particular short planning horizon, ad-hoc planning decisions, and acceptance of solutions, which are not socially or economically sustainable. One of the outcomes is a low respect for formally approved strategic planning documents.

The strategic development documents at the city level include:

1) *The City Master Plan.* The current Master Plan was approved in 2002 and largely followed the previous 1973 Master Plan as regards the overall architectural concept and planning approach. The Master plan had lost its strategic role, as it did not account for the latest economic and social developments, as well as new city planning practices.

2) Urban Development Norms. Current urban development norms were developed and approved in 2002. According to local architects, planners and developers, these norms do not satisfy demands of citizens and companies in regards to the comfort city environment, especially where parking places, green spaces, density of built-up areas etc. are concerned. 3) Urban Development and Land Use Rules were approved in 2008. Rules (1) establish requirements to functional zoning and to city planning regulations, (2) determine the procedure of permission applying of land plots and their use, (3) define the procedure of consideration and approving of deviations from the limit parameters of permitted construction, (4) describe requirements to planning, construction and reconstruction of built-up areas. Corrections and modifications of standards and limits set by the Rules occurred over the recent decade on a regular, rather than on an exceptional basis. E. g. in 2013, the City Administration approved 3–4 exceptions monthly. Thus, the legitimacy of urban policies and city planning documents was seriously compromised and questioned. This resulted in numerous conflicts between stakeholder groups.

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