



The Turkish way of housing supply and finance for low- and middle-income people



Hacı Mustafa Palancıoğlu^a, Mehmet Cete^{b,*}

^a Middle Anatolia Development Agency of Turkey, Kayseri, Turkey

^b Department of Geomatics Engineering, Faculty of Engineering and Architecture, Izmir Katip Celebi University, Izmir, Turkey

ARTICLE INFO

Article history:

Received 12 July 2013

Received in revised form 26 March 2014

Accepted 2 April 2014

Keywords:

Housing
Low-income housing
Revenue-sharing
Slum transformation
Turkey

ABSTRACT

Living in an adequate housing condition is a basic human right. However, low- and middle-income people are generally unable to exercise this right because of financial difficulties. This requires governments take necessary measures and actions to supply adequate housing both in numbers and social and physical conditions for their citizens. In this regard, the Turkish government prepared a comprehensive plan of social housing with the motto of “providing adequate housing for all” and implemented this plan through an approach of the Turkish Housing Development Administration (TOKI). This approach was found to be very practical for the social housing development and finance, and its applicability is considered by several countries in addition to the International Monetary Fund (IMF). This paper begins with an overview of social housing strategies in different countries. Then, it introduces duties, authorizations, and the financial structure of TOKI followed by description of various project implementations of the Administration including social housing, revenue-sharing and slum transformation. Finally, a discussion on the TOKI approach of housing supply and finance for low- and middle-income people is provided.

© 2014 Elsevier Ltd. All rights reserved.

Introduction

The Universal Declaration of Human Rights adopted in 1948 states that everyone has the right to a standard of living in adequate housing conditions (The General Assembly of United Nations, 2009). This right has been consistently confirmed as a distinct human right by various organizations across the world, including the UN, civil society bodies, as well as numerous national constitutions and legislations (Kothari, 2001; Hartwig and Marais, 2005; Milbert, 2006). Also the Heads of States or Governments reaffirm their commitments to the full and progressive realization of the right to adequate housing, as provided for in international instruments (UN-HABITAT, 1996; Paterson and Dunn, 2009; Gallent, 2009).

In this frame, Article 57 of the Turkish Constitution states that “The Government should take necessary precautions to meet housing needs of the citizens based on a plan prepared by taking the characteristics and environmental conditions of cities into consideration and also support mass housing initiatives.” For the implementation of this responsibility, various government

organizations such as the Turkish Real Estate Bank, General Directorate of Land Office and Housing Development Administration (Toplu Konut İdaresi, or TOKI) were set up in Turkey over time. However, these efforts had not been sufficient to meet the housing need of low- and middle-income people in the country where the need for housing units was nearly 1.5 million at the beginning of the 21st century (Bayraktar, 2008; TOKI, 2014; Keleş, 2006).

The Turkish Government declared a comprehensive plan to solve this problem with two articles in the Emergency Action Plan in 2003 (DPT, 2003). The first article states that squatter housing construction is prevented by the federal government in cooperation with local governments, while existing squatter areas are rehabilitated (Table 1). The second article urges that adequate housing units both in numbers and social and physical conditions are provided for low-income people in a short time and with affordable installments (TOKI, 2014). The Emergency Action Plan also states that an organization is established to solve the urbanization and housing problem, especially for low-income people. In this context, the Turkish Government reengineered the public organizations responsible from supplying land and houses for the citizens. The General Directorate of Land Office was closed down in 2004, and all duties of the office were transferred to TOKI which was already established with Mass Housing Law in 1984. Thus, TOKI has had new legal powers and policies and then it has initiated a large development plan for urbanization and housing campaign.

* Corresponding author. Tel.: +90 530 2077800; fax: +90 232 3860888.

E-mail addresses: hpalanci@erciyes.edu.tr (H.M. Palancıoğlu), mehmet.cete@ikc.edu.tr (M. Cete).

Table 1
Number of slums over the years in Turkey (Keleş, 2006).

Years	Number of slums
1955	50,000
1960	240,000
1965	430,000
1970	600,000
1980	1,150,000
1990	1,750,000
1995	2,000,000
2002	2,200,000

Today, TOKI is the most important implementation body of housing and settlement policies in the country through providing land and funds, and enabling the projects at the local level (TOKI, 2014).

This paper targets to introduce TOKI approach of housing supply and finance for low- and middle-income people as a good practice. It begins with an overview of social housing strategies in different countries. Then, it introduces duties and authorizations, financial structure and project implementations of TOKI. This introduction is particularly important for development of know-how, knowledge and tools in affordable housing finance for the poor people throughout the world. Finally, it provides a discussion on the housing supply and finance approach of TOKI for low- and middle-income people.

An overview of social housing strategies in different countries

From the mid-nineteenth century onwards the industrialization and associated urbanization generated acute housing shortages especially for low- and middle-income people in many large cities throughout the world. In addition to self-help housing (Bredenoord and van Lindert, 2010), social housing systems were developed in response to those shortages. Some industrialists began to provide housing for their workers, philanthropists provided newly built housing and charitable institutions developed housing projects for people on low incomes. While usually the State was not heavily involved in direct provision before, it took more responsibility for the provision of good quality housing to disadvantaged groups who were unable to afford decent housing from their own resources following the Second World War. By the 1970s, the role of the State began to change through a reduction in public expenditure on housing and an increasing market-orientation of housing policies. In the 1990s, most governments tried to reduce public expenditure on housing in the light of improving housing conditions and budgetary pressures and thus there was growing evidence of increased concern with allocation processes and the need to make these more responsive to consumer preferences (Oxley, 2000; Gruis and Nieboer, 2007; UN-HABITAT, 2009). The end of communism in the early 1990s also affected existing housing systems in many countries. There were large-scale privatizations of public rental stocks, which were predominated in 1960s, with sitting tenants acquiring ownership at nominal prices. This created poor homeowners who own their dwelling but lack the means to maintain the property in good repair. By the start of the twenty first century it was clear that housing shortages were not an issue of the past and insufficient supply was seen to contribute to severe affordability problems, especially for lower income households (Czischke and Pittini, 2007; Gruis and Nieboer, 2007; UN-HABITAT, 2009). Today, almost all countries with good practices in social housing development sector have well-functioning organizations and finance models that change depending on political and economic situations of the countries. The subsections given below provide some examples of social housing organizations and finance approaches in the western world. There are two main reasons to give examples from western countries. One of them is the ease of getting information

about the western countries' systems in the literature. The other is appropriateness of the western countries' social housing systems to compare with the Turkish system because Turkey has adopted western policies in many other domains in recent years.

Social housing organizations

The main difference between social housing organizations in different countries is participation level of central/local governments and private sector into the housing development programs. While central governments play a regulative role and sets up rules on the housing supply market in some developed countries, such as United States, Canada, Australia and Japan, the governments in most Western European countries have a strong management role in housing supply. Private sector is getting more roles in social housing supply recently and public-private sector cooperation is seen as a key component of successful housing supply programs implemented in several countries (UN-HABITAT, 2009; TOKI and IULA-EMME, 1993; Priemus et al., 1999).

There is a wide range of approaches formulated by different governments to provide housing for low-income families throughout the world. In Germany, for example, all social housing is legally private. Municipal housing companies are even private entities whose shares are held by the municipality (UN-HABITAT, 2009). In the Netherlands, associations build and manage social housing with a degree of independence from the State but with obligations to house low-income families in decent housing and contribute to the quality of neighborhoods (Boelhouwer, 2003; Gruis et al., 2005). In Sweden, Municipal Housing Companies can be organized either as foundations or limited companies. However, most of the foundations have been transformed into limited companies over the last decade so that municipalities can get a return on their investments in municipal housing. In England, provided mainly by local governments until the 1970s, social rental housing is now supplied largely by non-profit housing associations. Almost all new social housing is provided by housing associations and around half of all council housing is managed by Arms Length Management Organizations who have a degree of independence from the local authority (UN-HABITAT, 2009). In Bulgaria, Latvia, Lithuania and Romania, social housing is only publicly owned and financed from the municipal budgets (Pittini and Laino, 2011). In Ireland, local authorities have used a version of the state agent model in which the private sector is used to supply social housing since 1995. The local authorities establish contracts with market landlords who agree to provide accommodation meeting minimum standards and make direct payments to the provider and the tenants make a contribution to the costs by a payment to the relevant local authority (Buchanan, 2006; UN-HABITAT, 2009). In Canada, houses for low-income people are built by public housing agencies and subsidized by federal, provincial or local programs. Recently, there is a move toward the integration of public housing with market housing through revitalization plans in the country. In Australia, public housing funded by state and federal governments is usually provided by state and province governments. Existing public houses in Australia consist of low-density houses located in suburban areas and inner-city high-rise apartments in Melbourne and Sydney. In the United States, the United States Department of Housing and Urban Development (HUD) builds quality affordable homes for all. HUD mainly targets to strengthen the housing market, meet the need for quality affordable rental homes, and utilize housing as a platform for improving quality of life (HUD, 2012).

Social housing finance approaches

Social housing construction is generally financed by public grants/loans, standard bank loans, own funds of housing

organizations and sometimes also tenants' contributions (UN-HABITAT, 2009; Pittini and Laino, 2011). Most countries provide financial help to support the cost of investing in new social housing through public funds and public guarantees, at both national and regional level (Pittini and Laino, 2011). A subsidy to housing suppliers reduces costs below what they would otherwise have been and a subsidy to consumers reduces their housing payments below what they would otherwise have been (UN-HABITAT, 2009). Municipalities may also provide additional funding and land at reduced price for the construction of social housing. In cases where social housing is provided by local authorities, it makes a difference whether the financial burden lies entirely on the municipal budget or there is complementary funding, through transfers from the central budget or funding from specific schemes (Pittini and Laino, 2011). In England, for instance, grants provided to local authorities and housing associations have over many years allowed them to invest in new housing and the existing stock. Grants to housing associations are technically loans that are subordinated to the borrowing from private financial institutions, repayable only on sale of the property. This reduces the costs of private borrowing. Finance that involves subsidies can be raised and provided generally for the social housing sector with individual providers given a large degree of discretion as to which projects are instigated. Alternatively, and more usually, public funding is provided to support a specific program of investment (UN-HABITAT, 2009). In Spain, all sorts of developers can access preferential loans. In Italy, private providers can take part in certain social housing schemes based on agreement with their municipality. Legal arrangements to allow the creation of a non-profit housing sector newly enacted in Poland and Slovenia. Czech Republic launched new programs to support the provision of social housing by all types of providers in 2009. In England, profit making companies were entitled in 2008 to develop social housing (Pittini and Laino, 2011). An important factor in supporting the provision of social housing is, as implied above, the availability of land at discounted prices (UN-HABITAT, 2009; Pittini and Laino, 2011) as well as tax privileges for social housing providers (Reinprecht, 2007). Land at discounted prices, for example, is available for social housing in Austria, Italy and Luxemburg. Income and investment deductions, depreciation allowances, reduced sales and property taxes, exemptions from capital gains tax, and reduced value added tax rate are examples of the tax privileges (Pittini and Laino, 2011) and some forms of such tax privileges is applied, for example, in Germany and France (UN-HABITAT, 2009). The German social housing construction system is based on the allocation of public funding especially in the form of tax privileges to any kind of housing provider in exchange for the use of a dwelling for social purposes on a temporary basis (Pittini and Laino, 2011).

Many housing organizations throughout the world can get bank loans easily because they can use assets possess as security for loans. Some housing suppliers, for example, the Dutch housing associations, have built a strong asset base that allows commercial lenders to look on them as secure and low risk organizations (Gruis and Nieboer, 2007). These loans may be at commercial rates or may be supported by central government through the guarantee of such loans and thus available at sub-market rates. Providers are implementing innovative ways of pooling risk in different countries (Pittini and Laino, 2011). Another example is Sweden in that new construction by Municipal Housing Companies is funded on the open credit market. In general, 80–90% of building costs is covered by long-term loans with a maturity of 40 years or more; the rest is covered by the Companies' own resources. The private sector sources also include developers and employers who in some jurisdictions can be obliged to provide resources for social housing. Special purpose funding institutions have also been set up to support the funding of social housing organizations in some countries (UN-HABITAT, 2009).

Own resources of housing organizations are another way of finance in social housing development. Strong housing organizations can invest their balance sheets, reserves and surpluses in such housing activities. Funds are pooled to support weaker organizations or to promote innovation and competition. Revolving funds are established to serve as guarantee and/or to finance housing renovation as the case in the Netherlands, Denmark and France (Pittini and Laino, 2011).

Many variations of these funding mechanisms are to be found throughout the world. However, the adequacy of these mechanisms has been in question in many countries and it has been recognized that there is a need for innovative governance, local thinking, additional provision, better maintenance and improvement, regeneration and a wider range of services (UN-HABITAT, 2009; Carr and Mulcahy, 2010). The TOKI approach of housing supply and finance, in this context, may be considered as an original methodology.

The housing development administration of Turkey

The Housing Development Administration of Turkey (TOKI) founded in 1984 is a not-for-profit public sector entity furnished with a broad range of powers and duties in the housing sector. In the first years of its foundation, TOKI built social houses and transferred a considerable amount of funds to housing cooperatives and municipalities for the completion of housing projects. The Administration gave priority to produce land with infrastructure and allocated those to housing cooperatives between the mid 1990s and 2004. Since then, TOKI started building social houses for low- and middle-income people and implementing slum transformation projects instead of providing credits to those housing cooperatives. Affiliated with the Turkish Prime Ministry and headquartered in Ankara, TOKI carries out various projects spreading over the country with its about 600 employees. It also has 6 affiliated companies operating in the areas of housing and real estate appraisal, financing, project implementation and marketing. All these affiliated companies act as a crucial bridge for TOKI in the implementation and success of all the projects.

Duties and authorizations

The main duties of TOKI given by the related regulations are; (i) developing projects to implement housing, infrastructure and social facility applications both in Turkey and abroad, (ii) providing house credits for individuals and organizations, (iii) carrying out transformation projects in illegal settlement areas, (iv) preservation and restoration of historical areas, (v) construction of housing units along with social facilities and infrastructure in disaster areas, (vi) granting credits for improvement projects of rural architecture, (vii) making arrangements to encourage the participation of the banks in housing finance, (viii) supporting the housing industry, and (ix) issuing bonds and stocks.

To carry out these duties, TOKI is equipped with the authorizations of; (i) preparing development plans and revising current ones for social housing projects, (ii) expropriating real estates required to carry out the projects, (iii) developing projects for transformation of illegal settlements, (iv) provision of land for residential, industrial, educational and health use, tourism investments, and public facilities, (v) preparing, selling, renting, exchanging and marketing land for development projects, (vi) obtaining public lands free of charge based on approval of the related ministries, (vii) determining prices of houses constructed by TOKI by taking the construction costs, the income status of the residents and the economic conditions of the construction area into consideration, and (viii) founding companies working in the housing sector.

Financial structure

TOKI is a non-profit state organization and exempt from corporate tax. It cannot be liquidated or declared bankrupt, and its assets are protected. The budget of TOKI is outlined in collaboration with the Prime Ministry and the Ministry of Finance. Funding received from the government represents a low proportion of TOKI's income sources. The allocated public lands or investment targets of the government affects the Administration's financial performance. Most of TOKI's about 160 million square meters of land has been transferred from the Treasury and other public institutions, whilst a minor portion has been purchased at a preferential price or expropriated (Soldi et al., 2008).

The main income resources of TOKI are outlined in the Mass Housing Law No. 2985. The most important one is the income obtained from the sale and rental of houses, offices and land. To date, TOKI has reported very low delayed re-payments on housing loans provided. This has been primarily favored by the credit-protection measures embedded in the loan agreement (Soldi et al., 2008). In addition, revenue-sharing projects, international credits provided upon the approval of the Treasury Undersecretariat, interest income, payments and duties allocated with the Budget Laws, and donations and aid given to the TOKI are among the income resources.

TOKI has been able to maintain a strong, increasing and manageable financial budget, since it does not only provide funds to customers in the housing sector but it also take part in the social and profit-oriented housing production. It also has an increasing investment activity with the expanding portfolio and increased housing sales since 2004. Therefore, most of the domestic banks are willing to allocate funds to TOKI.

The projects implemented by the administration

TOKI carries out various applications throughout the country. The major application areas include the production of social houses for low- and middle-income people, developing revenue-sharing

projects to generate funding especially for social housing projects, and implementing slum transformation projects. In addition, TOKI constructs houses for people living in disaster areas and for disabled/dependent citizens, develops projects to prevent rural to urban migration, produces land to regulate real estate prices, builds houses for immigrants, and provides housing credits to individuals and public-private organizations. The Administration also carries out various social projects. In this context, 952 schools, 41 libraries, 493 religious and 976 sport facilities, 239 hospitals and 94 health care centers, 152 dormitories, and 500 business centers were completed by the early 2014 (TOKI, 2014).

Social housing projects

TOKI has developed various affordable social housing projects for low- and middle-income people in Turkey through an innovative financial approach. While housing affordability is generally evaluated with a ratio of housing expenditure-to-income and residual income in many countries (Hulchanski, 1995; Heylen and Haffner, 2013), it is provided by constructing housing units in different sizes and flexible re-payment plans in the TOKI approach. Low- and middle-income people select appropriate housing sizes and re-payment plans provided by TOKI, and thus they provide the affordability for their own situations. Actually the approach works similar to a mortgage model with long maturities and a low yield for the customers of the projects. In this social housing production approach, an appropriate land is allocated and the project design is realized for the housing project (Fig. 1). A tender process is conducted and the contractor who will implement the project is chosen. The construction of housing units is begun which takes generally 14–24 months for completion. The sale prices of housing units are determined by considering the construction costs which are provided based on the quotations of the contractors in addition to the cost of the land, infrastructure, social and technical expenses. The housing units are then sold to the appropriate customers. A down payment which is between 10% and 40% of the cost of the house is initially collected, and monthly installments are calculated

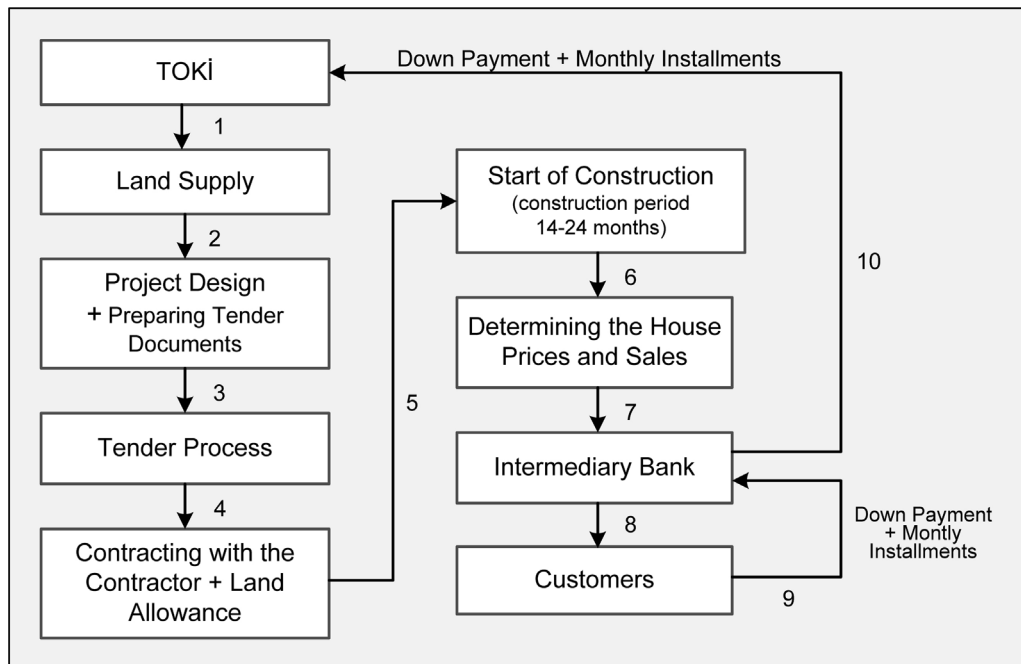


Fig. 1. TOKI's Social Housing Production Model.

Adapted from TOKI (2014).

by spreading over the maturity between 5 and 20 years upon signing the housing contract with the customer. A down payment is not collected for the houses constructed for very low-income people. Equal monthly installments are adjusted semi-annually based on the changes in the consumer price index, producer price index and the official growth rate for public-sector wages. Payments of loan installments are deposited by the bank (acting also as a servicing agent), which also collects real estate taxes and insurance premiums on behalf of TOKI, and the sums collected are transferred to TOKI (the lender) usually within five days. The bank retains the commission from down payments made by customers and transfer procedures. Rights and liabilities of the owner can be transferred during the loan period to a third party and the transferee (if eligible for public housing) assumes the original obligation. The monthly installments are under guarantee as the property rights of the house remain on TOKI which acts until end of the maturity. That is; TOKI is acting as a “guarantor” for the monthly installments of the project (Soldi et al., 2008).

The constructed housing units vary in size between 45 and 132 m². The distribution of sales demonstrates that the housing credits have been used by workers (31%), civil servants (30%), retired (7%), middle tradesmen (13%) and by others (19%). This indicates that the approach is planned to serve TOKI’s mission of “providing adequate housing both in numbers and social and physical conditions for all” (Soldi et al., 2008).

While TOKI completed about 44,000 housing units until early 2004 when the re-structuring of TOKI took place; by the early 2014, this figure jumped to about 521,536 of which 501,041 were sold. These housing projects have been brought into life in more than 2500 construction sites distributed all over the country. On the other hand, TOKI gives priority to the areas where housing need is at the significant levels. In this framework, the first target of TOKI to build 500,000 housing units which are 5–10% of the housing need of Turkey has been accomplished (TOKI, 2014).

Revenue-sharing projects

The revenue-sharing approach developed by TOKI is an innovative methodology that aims to transfer money earned from the projects designed especially for high-income families with high standards to the social housing projects. In the revenue-sharing projects, housing units with high standards are constructed by private constructors on TOKI-owned lands (Tuhral, 2005). The Administration receives its share at the end of the project even the case expected revenue is not obtained. If the obtained revenue is higher than the expected one, the extra revenue is shared between both parties. It means the public interest is guaranteed. During implementation of the approach, an appropriate land in the project area is determined by TOKI and a tender process is carried out to choose the private contractor (Fig. 2). The contractor is determined based on the expected total income from the project and the share distribution between TOKI and the contractor. All investment costs are covered by the contractor during the construction stage of the project. The sale prices of the housing units are determined by both parties, and sales take place under the supervision of TOKI. The approach provides only short-term financial credits for customers. All down payments and monthly installments are deposited to the TOKI’s bank account. The revenue is shared between TOKI and the contractor.

TOKI produced 87,358 (approximately 15% of its overall production) housing units using this approach by the early 2014. It has earned about 30% of its overall income from these housing units since 2004. This indicates that revenue-sharing projects will continue to be an important financial source of the Administration in the near future (Soldi et al., 2008; TOKI, 2014).

Slum transformation projects

TOKI has realized extensive slum transformation projects in cooperation with local authorities in the country. The target of

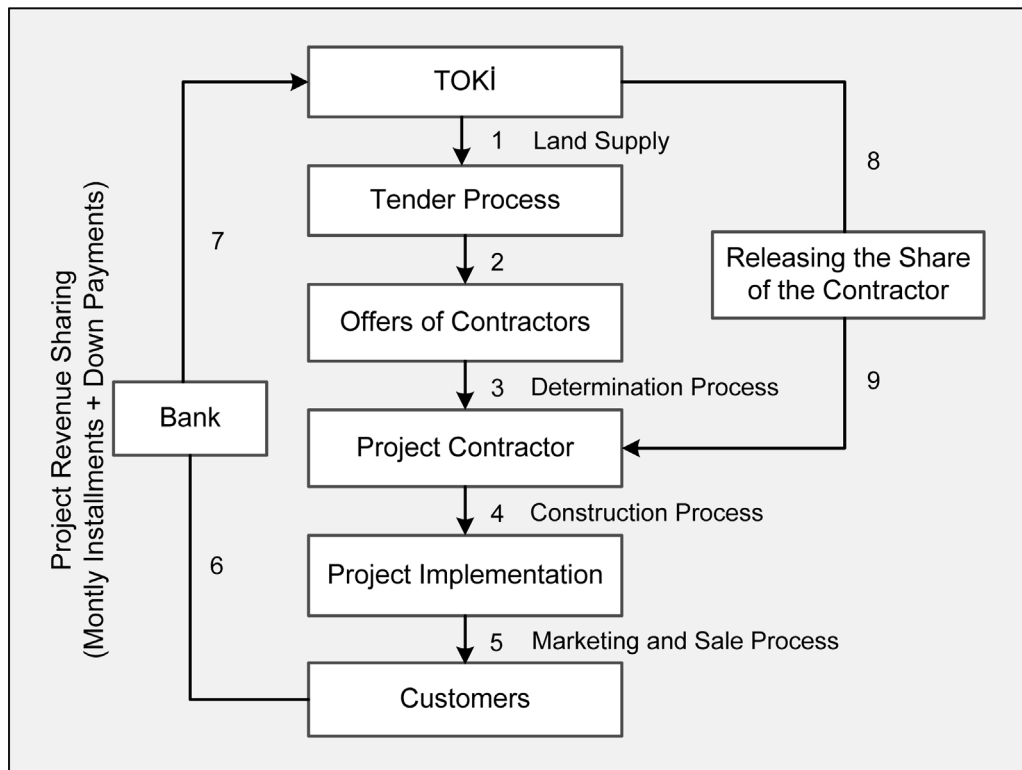


Fig. 2. TOKI’s Revenue Sharing Model.

Adapted from TOKI (2014).

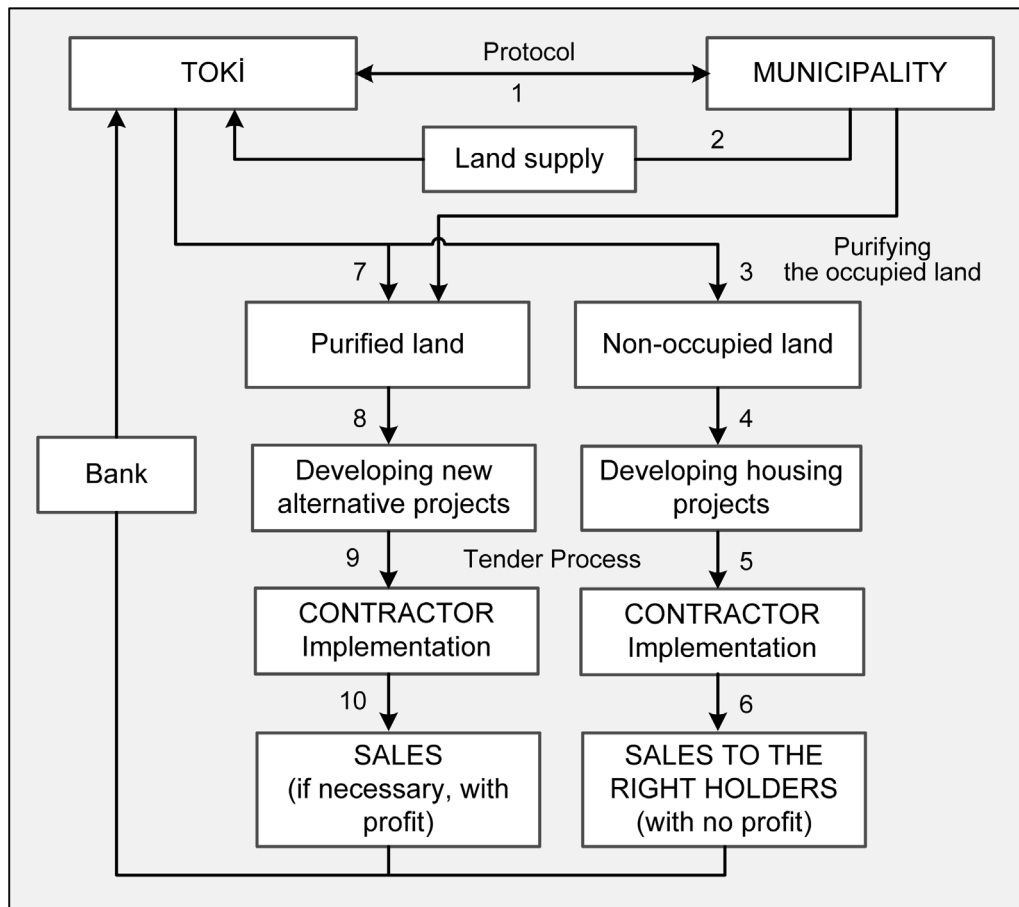


Fig. 3. TOKI's Slum Transformation Model.

Adapted from TOKI (2014).

implementing such projects is to transform the illegally occupied and underdeveloped slum areas, which lack basic urban services, into livable spaces. The slum areas are generally located around the city centers where land is highly precious and expensive. This makes it easy to carry out transformation projects in financial means (Uzun et al., 2010).

TOKI has two alternative approaches for implementing transformation projects in slum areas. In the first approach, local authorities determine the slum area where the transformation project is going to be implemented (Fig. 3). A protocol between TOKI and the local authority is signed to carry out the project. Modern housing units for slum owners are constructed by TOKI on a vacant area supplied by the local authority. Slum owners are identified by the local authority and moved to the newly constructed housing units. The slum area is purified by the local authority and then it is used to develop new alternative projects in the partnership of TOKI and the local authority (Uzun et al., 2010).

In the second approach, the transformation project is performed on the same slum area after purification of the slums. A protocol between TOKI and the local authority is signed to carry out the project and then TOKI constructs housing units for slum owners. New housing units are given to the legally entitled right holders in return for their land parcels (Uzun et al., 2010).

In both approaches, financial settlement processes between TOKI and entitled right holders are handled. The right holders either agree to receive a payment in cash for their property from TOKI or the existing property value is subtracted from the cost of the new home they have agreed to purchase from TOKI. The remaining payment of the new home is paid over with an average of 180

monthly installments. Land may be legally expropriated if parties cannot reach a financial settlement, but this is only a matter of concern when all the other options are exhausted (TOKI, 2011).

TOKI has prepared a slum transformation program covering 222 project areas and 264,811 housing units in the country as of early 2014 (TOKI, 2014). Some of these projects have already been implemented. Erzinçan-Çarşı Quarter Slum Transformation Project, one of these projects, received "the good practice award" of United Nations Human Settlements Program (UN-HABITAT) and Municipality of Dubai in 2008 (Fig. 4) (Uzun et al., 2010). From now on, TOKI is planning to focus on realization of slum transformation projects especially in metropolitan cities of Turkey because these cities have been occupied with non-quake-proof buildings and are under earthquake risk. Those transformation projects will also provide new houses for low- and middle-income people.

Discussion on the approach

When the Turkish and other countries' social housing systems are compared, some similarities and differences stand out in organizational and financial means. For example, similar to the situation in many other countries around the world, public-private sector cooperation has an important role in successful implementation of social housing projects in Turkey. Thanks to the tender process followed during construction of the houses in TOKI projects, the houses are built by private companies. Social housing projects of TOKI are financed by bank loans but it is easy to get loans for the projects because TOKI has an increasing investment activity with the expanding portfolio and increased housing sales since



Fig. 4. A slum transformation project: Erzincan example (TOKI, 2014).

2004 and it can not be liquidated or declared bankrupt. Therefore, most of the domestic banks in Turkey are willing to allocate funds to TOKI. On the other hand, unlike the practice in many other countries throughout the world, municipalities mostly do not have core responsibilities in social housing provision in the country; instead they assist TOKI during site selection and implementation of the projects.

The TOKI approach of housing supply and finance for low- and middle-income people presented above sections is a good practice not only to supply affordable housing units especially for low- and middle-income people but also to prevent construction of new slums, to regulate housing prices and rents in cities, to prepare livable environments for the people who are living in slum areas with lack of adequate infrastructure, social facilities, transportation, and others, to provide planned urbanization, to move from jerry-built houses to a well structured and quakeproof houses, to provide shelters for victims of disasters, disabled citizens and other needy people, etc. (Table 2). The approach is also a good practice for the UN-HABITAT proposal that the housing standards of those who

are living in sub-standard accommodation is best done through the direct provision of housing rather than only by the provision of additional financial resources to the poorly housed (UN-HABITAT, 2009).

The approach, on the other hand, can be improved by some additional considerations. Due to the increase in population, rural to urban migration and economic improvements, the housing sector which includes players from the private sector, housing cooperatives and local authorities is highly active in Turkey. Therefore, the sector needs to be regulated and managed more effectively. TOKI should be the organization not only producing different types of housing projects, but also regulating and organizing the housing sector in the country. In this context, the organizational structure of TOKI should be improved by opening regional branches to enable realization of this duty, as well as understanding the local needs in a better way and developing more comprehensive projects. This will also provide an increase in the quality of services provided by TOKI.

Producing 5–10% of the housing needs in Turkey, TOKI is a powerful and key player in the housing sector. Thus, a comprehensive survey and analysis should be conducted to measure the effects of TOKI on the private housing sector.

While housing needs of many low- and middle-income people are met through social housing and slum transformation projects of TOKI, social, cultural and economic developments of the people are generally ignored in these projects. In this context, especially modern applications of urban regeneration projects taking social, cultural, economic, environmental etc. aspects into consideration need to be implemented instead of old-fashioned urban transformation projects focusing just on renewal of the buildings. People should be located in the same or nearby location after the projects. Industrial and commercial investments should be encouraged around the project areas to provide jobs especially for low-income people living in these areas.

Social houses produced by TOKI have similar characteristics and architectural plans which do not have satisfactory esthetics. Therefore, the Administration should produce social houses having different characteristics and architectural identity.

Conclusion

Most developing countries are experiencing housing shortage for low- and middle-income people throughout the world. This shortage results with construction of illegal houses lacking from basic infrastructures especially in underdeveloped or developing countries. Therefore, those countries need to learn some insights from good practices of affordable housing development systems in other countries. Such systems may not be copied from other countries' systems but it is possible to get good inspirations from

Table 2
Some benefits of the TOKI approach.

Benefits	Facts
Supplying affordable housing units for low- and middle-income people	521,536 affordable housing units have been constructed for low- and middle-income people by TOKI. Affordability is provided by housing units constructed in different sizes and with flexible payment plans.
Preventing construction of new slums	264,811 new housing units have been planned to be constructed in a couple of years in slum transformation projects throughout the country. The houses offered to low income people without down payments and with lower than 50 USD monthly installments prevent construction of new slums.
Regulating housing prices and rents in cities	The TOKI houses constructed in different cities increase housing supply and thus regulate housing prices and rents.
Preparing livable environments for the people living in slum areas	TOKI not only construct houses in the project areas but also provide adequate infrastructure, social facilities, transportation, and other services.
Providing planned urbanization	TOKI prepares or revises development plans in the project areas based on the requirements of development regulations.
Moving from jerry-built houses to a well-structured and quakeproof houses	Most part of Turkey is under earthquake risk and all buildings projected by TOKI are constructed by taking this reality into consideration.
Providing shelters for victims of disasters, disabled citizens and other needy people	TOKI construct houses especially for victims of earthquakes, disabled citizens, and needy and other dependent people throughout the country.

the others and then to adapt them its own unique circumstance. In this regard, the authors target to publicize the Turkish way of affordable housing supply and finance for low- and middle-income people as a good practice through this article.

The TOKI approach presented in the above sections provides affordable housing supply for low- and middle-income people with a well structured financial mechanism. In addition to production of more than 500,000 housing units up to now, TOKI has succeeded implementation of revenue-sharing, slum transformation and various other social projects in the country. In this manner, the approach which has been studied by the International Monetary Fund (IMF) as well as by countries like Qatar, Kuwait, and Mexico offers a framework to solve housing needs and related settlement issues in countries where similar problems are experienced.

References

- Bayraktar, E., 2008. Concern and trust of our customers to TOKI houses is the biggest prize for us. *J. Portrait* (January–March), 50–56 (in Turkish).
- Boelhouwer, P., 2003. Financing social housing in the Netherlands: the road to independence. *Hous. Finance Int.* 17 (4), 17–21.
- Bredenoord, J., van Lindert, P., 2010. Pro-poor housing policies: rethinking the potential of assisted self-help housing. *Habitat Int.* 34, 278–287.
- Buchanan, L., 2006. Promoting Good Standard Rental Housing; Irish Experience. ENHR, 2–5 July, Ljubljana, Slovenia.
- Carr, J.H., Mulcahy, M., 2010. Twenty years of housing policy: what's new, what's changed, what's ahead? *Hous. Policy Debate* 20 (4), 551–576.
- Czischke, D., Pittini, A., 2007. Housing Europe 2007: Review of Social Co-operative and Public Housing in the 27 EU Member States. CECODHAS European Social Housing Observatory.
- DPT, 2003. Emergency Action Plan of Turkey's 58th Government. State Planning Organization of the Turkish Prime Ministry, Ankara (in Turkish).
- Gallent, N., 2009. Affordable housing in 'Village England': towards a more systematic approach. *Plann. Pract. Res.* 24 (2), 263–283.
- Gruis, V., Elsinga, M., Wolters, H., Priemus, H., 2005. Tenant empowerment through innovative tenures: an analysis of Woonbron-Maasoovers' Client's Choice Programme. *Hous. Stud.* 20 (1), 127–147.
- Gruis, V., Nieboer, N., 2007. Government regulation and market regulation in the management of social housing assets: limitations and opportunities for European and Australian landlords. *Eur. J. Hous. Policy* 7 (1), 45–62.
- Hartwig, R., Marais, L., 2005. Farm-worker housing in South Africa: an evaluation of an off-farm housing project. *Hous. Stud.* 20 (6), 931–948.
- Heylen, K., Haffner, M., 2013. A ratio or budget benchmark for comparing affordability across countries? *J. Hous. Built Environ.* 28 (3), 547–565.
- HUD, 2012. Official website of the U.S. Department of Housing and Urban Development, <http://www.hud.gov> (accessed 01.06.13).
- Hulchanski, J.D., 1995. The concept of housing affordability: six contemporary uses of the expenditure to income ratio. *Hous. Stud.* 10 (4), 471–492.
- Keleş, R., 2006. *Urbanization Policy*, 9th ed. Imge Press, Ankara, ISBN 975-533-053-4, 780 pp. (in Turkish).
- Kothari, M., 2001. *The Right to Adequate Housing is a Human Right*. United Nations Chronicle Online Edition. Department of Public Information, UN.
- Milbert, I., 2006. Slums slum dwellers and multilevel governance. *Eur. J. Dev. Res.* 18 (2), 299–318.
- Oxley, M., 2000. *The Future of Social Housing: Learning from Europe*. IPPR, London.
- Paterson, E., Dunn, M., 2009. Perspectives on utilising community land trusts as a vehicle for affordable housing provision. *Local Environ.* 14 (8), 749–764.
- Pittini, A., Laino, E., October 2011. *Housing Europe Review 2012*, The nuts and bolts of European social housing systems. CECODHAS Housing Europe's Observatory, Brussels, Belgium.
- Priemus, H., Dieleman, F., Clapham, D., 1999. Current developments in social housing management. *J. Hous. Built Environ.* 4 (3), 211–223.
- Reinprecht, C., 2007. *Social Housing in Austria*. Social Housing in Europe. London School of Economics and Political Science, LSE London, ISBN 978-0-85328-100-9, pp. 35–43.
- Soldi, F., Amenta, T., Lemay, Y., 2008. Moody's International Sub-Sovereign – Toplu Konut İdaresi Başkanlığı. *Credit Anal.* (February), 1–10.
- The General Assembly of United Nations, 2009. The Universal Declaration of Human Rights. Adopted and proclaimed by General Assembly resolution 217 A (III) of 10 December 1948.
- TOKI, 2011. *Building Turkey of the Future*, Corporate Profile 2010/2011. Republic of Turkey Prime Ministry Housing Development Administration of Turkey, Ankara.
- TOKI, 2014. Official website of TOKI. Housing Development Administration of Prime Ministry of Turkey, Ankara (in Turkish).
- TOKI, IULA-EMME, 1993. *Housing Policies and Financing*, Third Report of Report Series of Local Authorities Development Programme. Kent Press, Istanbul, ISBN 975-7741-36-1 (in Turkish).
- Tuhral, M., 2005. *Real Estate Development Process in Turkey*. Royal Institute of Technology, Department of Infrastructure Building and Real Estate Economics, Stockholm.
- UN-HABITAT, 1996. *Istanbul Declaration on Human Settlements*. United Nations HABITAT, Istanbul.
- UN-HABITAT, 2009. *Financing Affordable Social Housing in Europe*. United Nations Human Settlements Programme (UN-HABITAT), Nairobi, Kenya, ISBN 978-92-1-132158-6.
- Uzun, B., Çete, M., Palancıoğlu, H.M., 2010. Legalizing and upgrading illegal settlements in Turkey. *Habitat Int.* 34, 204–209.