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Investigating the most essential skills of planners in Ethiopia's Amhara National Regional State's Regiopolitan cities

Journal of Innovation and Entrepreneurship

Provided in Cooperation with: Springer Nature

Suggested Citation: Workineh, Nigatu Amsalu (2022) : Investigating the most essential skills of planners in Ethiopia's Amhara National Regional State's Regiopolitan cities, Journal of Innovation and Entrepreneurship, ISSN 2192-5372, Springer, Heidelberg, Vol. 11, Iss. 1, pp. 1-15, https://doi.org/10.1186/s13731-022-00265-w

This Version is available at: https://hdl.handle.net/10419/290226

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Journal of Innovation and Entrepreneurship

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Investigating the most essential skills of planners in Ethiopia's Amhara National Regional State's Regiopolitan cities



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Abstract

This study intends to answer the specific skills and skills Ethiopian planners, particularly Amhara National Regional State's Regiopolitan cities planners, require the most in their urban planning profession. In today's urban world, understanding city dynamics, forecasting and predicting vibrant cities, making urban planning decisions and putting them into practice, collaborating with stakeholders from various governments and educational backgrounds, persuading people to accept urban plans, and building good personal and skilled relationships have all become highly complex and challenging. As a result, to succeed in their jobs in Ethiopia, planners must possess particular skills. This study looks into the essential skills that planners require in today's dynamic and complex urban environment. The investigation was conducted in Ethiopia as part of a more extensive regional study of Regiopolitan cities. A structured questionnaire survey of 104 experienced planners was undertaken, and semi-structured in-depth interviews with 9 key informants to investigate the essential planners' skills in the Ethiopian planning system to find the essential skills needed in practice. The findings demonstrate that an urban planning method in Regiopolitan cites of Amhara National Regional State, Ethiopia urban planning system is such practical planners who wish to carve out a position for them must equip themselves with analytical and synthesis skills. Finally, the study included recommendations for improving planners' future skills and more research into the matter.

Keywords: Cities, Ethiopia, Planners, Skills, Urban

Introduction

Urban areas currently have more than half of the world's population. Furthermore, due to the push and pull dynamics that drive people to urban areas in search of more essential economic possibilities and more standard quality of life, the rate of urbanization in developing countries is increasing. However, as urbanization increases, skilled planners would be required to fulfill the increased demand for services and amenities that are insufficient for city dwellers. One of the current issues facing high-rate urbanizing countries is the lack of skilled planners in the planning system. As a result, the current issues in developing countries demand some specific planning skills for planners to



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Additionally, various actors in the urban planning process interact on a complexly interwoven mix of themes, including elected officials, skilled staff, corporate people, nongovernmental organizations, and others (Throgmorton, 2021). As a result, planners work with various players, including residents, legislators, and developers, to make decisions regarding places and societies, their debated practices, and the complexity of power relations. Actors typically respond to planners in terms of their interests, values, and tales, which might influence the activities of planners. It is essential, but not sufficient, to drive the city's growth in a preferred, possibly better, direction. There are various reasons for inadequacy, but planners' skills are the most common (Throgmorton, 2021).

Although there is a growing of research on urban planner skills in planning education, it is frequently critiqued for being overly theoretical (Pojani et al., 2018). An urban planner with meeting facilitation skills, for example, may not be sufficient; they must comprehend the underlying nature of political processes in planning (Das et al., 2020). As a result, planners are expected to work in various settings, requiring the application of both theoretical and technical skills (Planning Institute of Australia, 2015).

Because it is the unsteady, constantly renegotiated resolution of various inconsistencies, paradoxes, and conflicts, urban planners work is more difficult to practice (Fischler, 2012).

Most urban planners use experiential learning strategies to apply spatial planning and design theories to real-world circumstances, putting development practices in a theoretical context (Balassiano, 2011; Nemeth & Long, 2012). Instead, urban planning is viewed as a technical and value-free activity for defining problems, developing solution choices, and selecting among them to attain an apparent, rather than contested, common good. As a result, planners are viewed as value-neutral specialists whose influence on planning processes is often uncontested.

Governments and agencies use guidance to guide planning policies and influence planning practices in the direction they wish. However, a literature review revealed a lack of studies planners' skills in developing nations, particularly Ethiopia. The questions here are about the essential skills of planners in the execution of the urban planning process in cities because studies have shown that there are gaps in the essential urban planner skills used in city planning. Furthermore, the results of previous studies on the essential skills of planners in the urban planning process vary. They also concentrated on urban planning educational skills but not essential urban planner skills in city planning execution.

Furthermore, just a few studies have focused on identifying and rating the most significant urban planning skills. Planners' practical skills in tackling various issues in preparing and implementing urban plans in towns and cities are also lacking. Furthermore, the researcher has discovered from experience and research that various urban planners have different skills in urban planning. Based on a preliminary assessment of related literature, it was discovered that there had been insufficient research on the topic in Ethiopia in general and Regiopolitan centers in the Amhara National Regional State in particular. As a result, the study looks into planners skills, precisely the essential practical urban planner skills required for excellent urban planning practice but are understudied and show disparities in study outcomes.

Therefore, this research had two goals. It sought to identify various planner skills and highlight the essential skills for planners in Ethiopia's Amhara National Regional State's major cities. To achieve the study's above goals, the following questions about planners skills in urban planning in Ethiopia's Amhara National Regional State's Regiopolitan cities:

- 1. What are the various skills that planners have in the field of urban planning?
- 2. What are the essential skills for planners in urban planning?

Literature review

Skills of planners

The skills of planners in urban planning and which skills are required for planners who participate in practice to thrive in the skilled course of planning are essential subjects to be researched. The skills needed in urban planning have been discussed in this section. The research also compared the arguments in the papers with those in the Ethiopian system, particularly Regiopolitan cities of Ethiopia's Amhara National Regional State.

Urban planners face too many new challenges and opportunities every day in their careers (Yomtov, 2015). Is an urban transportation system synchronized with the alarmingly growing population? Is sufficient housing being built to meet augmented demand? Will there be sufficient places to shop or adequate businesses to provide employment? These are the challenging questions an urban planner grapples with every day. Urban planning challenges such as population growth, climate change, resource scarcity, slum growth, increased poverty, and safety and security are unsolved common assignments to urban planners.

Currently, literature on the skills of urban planners in an educational context is increasing globally. There were studies on the skills of urban planners focusing on planning education but the empirical results on the most essential skills were not the same. Moreover, most urban planners were not having the skills of working with those challenges and problems (Yomtov, 2015).

The skills and competencies of urban educational planners were categorized into six types in studies. Writing, communication, analysis, design, management, planning history, and theory were among the skills required (Ozawa & Seltez, 1999; Seltez & Ozawa, 2002).

The other study which had done a special assessment on urban planners' skills was in Southern California. The study considered skills such as communicational skills, report writing, regulations and policies, familiarity with laws, effective presentation, management, understanding customer and public needs, writing for government, quantitative analysis, and technical skills. The surveys on 638 planning, planning-related as well as non-planning experts studied which career skills they value most. Urban planners' skills were ranked and communication skills, particularly report writing and writing for government are the most important skills for planners (Guzzetta & Bollens, 2003).

Moreover, there is a difference between locally specific and global urban planning abilities and divided urban planners' skills into three analytical, technical, and political (Horen et al., 2004). According to them, analytical abilities were skills such as problem structuring, problem-solving, offering a creative and novel framework for dealing with complex problems, ability to integrate social, economic, political, and institutional dimensions to comprehend urban and rural changes and growing quality, and the way of changing this knowledge into action. As well, as technical ability skills such as statistics, sociology, economics, Geographic Information System (GIS), decision-making mechanism, graphic, special software, and basic design, planning law knowledge, report writing, ecologic analysis, and urban planning and project management. Socio-political ability was other abilities which include institutional communications, citizen involvement, discord solving, communication, negotiation, and facilitator. Besides, communication skills become essential in recent years. Moreover, Royal Town Planning Institute emphasized skills including negotiation, mediation, advocacy, and teamwork in urban planning (Ellis et al., 2008).

The other important skills for urban planners in the twenty-first century are competence building for thinking, critical investigating, communication with different professions and communities, and strategic act (Budge, 2009), He also introduces certain general skills for urban planners like negotiation, project management, conflict resolution, practical knowledge, and planning law.

The skills of planners were also listed as research ability and data collection, problem formulation, quantity, and computer analysis, oral & graphic presentation, writing, cooperative problem-solving, plan to make, and action plan (Bayer et al., 2010). According to this study result, the most essential skills for an urban planner were having holistic thinking about problems and objectives.

Then, based on the literature analysis, the skills of planners were also classified into six general categories including presenting, communication, design, management, creative skills, and analytical and synthesis skills (Bahrainy & Fallah Manshadi, 2017). Their findings revealed that teamwork, research method and data collecting, and technical skills are the most essential at the undergraduate level in Iran. In contrast, problem definition, analytical skills, and oral presentation are essential to graduate level. Managerial skills aren't essential at either level.

A recent study classified urban planner skills into eighteen categories, including teamwork, management, negotiation, presentation, communication skills with your team, communication with the community, problem-solving, finding alternatives, report writing, data collection methods, data research, innovation and creativity, data analysis, self-learning, scientific research, evaluation, and criticism, and using references (Megahed et al., 2019). According to this study's findings, communication and negotiation skills and information gathering and data processing skills are essential for graduates. However, a thorough examination of the existing research

on planner skills aligned with professional practice finds gaps and flaws. Planners' practical skills in tackling various issues in preparing and implementing urban plans in towns and cities are also lacking. Furthermore, the researcher has discovered from experience and research that various urban planners have different skills in urban planning.

Urban planning educational skills were also studied, but not actual urban planner skills planners in the execution of urban planning in cities. Furthermore, the methodology for investigating these flaws must begin with the concerned experienced planners.

A review of data and materials from concerned professionals regarding the key skills planners in urban planning would be another potential path of inquiry. Finally, the study of planner skills enhances planners' comprehension of the actual condition of cities. According to the literature review, it may also raise planners' skills to acquire product review's planning work. As a result, the research is essential for today's urban planners.

Urban planning and planners in Ethiopia

All Ethiopia is listed as among the least urbanized countries in the world even in sub-Saharan Africa (UNHABITAT, 2008). However, it is one of the fastest urbanizing nations with numerous urban challenges and problems which require proper urban planning. Though fast urbanization, the urban planning experience in Ethiopia has a short history (NUPI, 2008). Urban planning practice in the country indicated many recognized urban centers have no good plans to guide their rapid urbanization. They face challenges in putting their ideas into action and the fast urbanization in Ethiopia has indicated numerous challenges in different aspects. This is because inefficient urban planning resulted from insufficient urban planning skills for managing urbanization.

In recent years, Ethiopia has experienced urban planning processes that have been practical to develop Ethiopian cities. However, urban planning has been unsuccessful to tackle the challenges and the problems facing the cities and towns. Hence, the status of urban planning and skills in urban planning in Ethiopia in general and Regiopolitan cities of Amhara National Regional State, in particular, seem to be an infant stage. Besides, getting literature on a particular topic was hardly easy.

Thus, adopting an improved urban planning approach became the focused issue in the past few years in the country for those who have concerns about urban planning. Therefore, the federal urban development policy document prepared in 2006 stated two major problems of Ethiopian urban centers. They are developmental problems and problems of democratization and good governance. According to this document, problems of democratization and good governance were lack of political, administrative, and economic decision-making autonomy, lack of democratic thinking on the duties and responsibilities of urban society, lack of community participation in development endeavors, lack of support for private sectors participation in urban development activities, absence of transparency, responsibility, and justice in the urban bureaucratic system due to the capacity problem in leadership and limited right on local resource (revenue) mobilization (Workineh, 2021). It had been clearly stated that the skills of urban planners as one of the problems in the Ethiopian urban development process. However, what were the most essential skills was the unanswered question then and today. Therefore, for urban development planning and implementation to be effective, the skills of urban planners in the process are needed so that urban challenges and problems can be tackled through proper planning. Hence, there should be a need for a greater role of skilled planners in urban planning. Urban planning proclamation No. 574/2008 has been also proclaimed as a legal framework that stipulates the importance of urban planning and skills. One of the reasons for the urban planning proclamation 574/2008 of Ethiopia has enacted was to create a favorable condition for every citizen in the urban process for a better quality of life. Moreover, the revised proclamation for the establishment, organization and definition of powers and duties of urban centers of the Amhara national regional state Proclamation No. 91/2003 of chapter nine in preparation of urban planns states that the urban planners should have skills to enable the stakeholders beneficial from the urban planning process.

Currently, these were some of the evidence that there is the existence a deficiency of knowledge in the answering the critical question, what were the most essential skills of urban planner professionals in Ethiopia, particularly, in Ethiopia's Amhara National Regional State's Regiopolitan cities. Therefore, identifying the most essential skills of urban planners was an important topic for investigation.

Methods and materials

Location of the research area

The research was conducted in the Amhara National Regional State's Regiopolitan cities in Ethiopia's northwestern and north-central regions. The study was carried out in all of the region's urban cities, including Bahir Dar, Gonder, Dessie, Kombucha, Debre Birhan, and Derbere Markos.

Research design

Amhara National Regional State's Regiopolitan cities were mentioned, and there are six Regiopolitan cities with structural plans. Structural plans are higher-order plans that are more difficult to create and implement in urban areas. As a result, the researcher purposefully selected Bahir Dar, Gonder, Dessie, Kombolcha, Debre Birhan and Debre Markos Regiopolitan cities.

The plan's similarity, complexity (higher-order plan), and plans to provide service to a more considerable population of residents in the region were all factors in choosing these cities. They are the cities in which the majority of urban planning efforts are taking place.

The study also included the Amhara National Regional State urban development, housing, and construction bureau, Amhara National Regional State urban planning institute, West Gojam, East Gojam, North Gonder, South Wollo, and North Shewa zone urban development, housing, and construction department, Bahir Dar, Gonder, Dessie, Kombolcha, Debre Birhan, and Derbere Markos city administrations as the zonal and regional organizations involved in urban planning. Because it involves primary data sources on the subject under inquiry, the study used a purposeful (non-probability) sampling strategy. The purposive sampling technique was chosen to research the essential urban planner skills required because it requires particular understanding and awareness about urban planners skills. As a result, the non-probability sampling, purposive (judgmental) selection was administered to planners from the Amhara National Regional State urban development, housing and construction bureau, Amhara National Regional State urban planning institute, West Gojam, East Gojam, North Gonder, South Wollo & North Shewa Zone urban development, housing and construction department, Bahir Dar, Gonder, Dessie, and Amhara National Regional State urban development, housing and construction department, Bahir Dar.

The actors (sample frame), sample size, sampling procedure, and the explanation for the researcher's choice of the method are listed in Table 1.

The study used both primary and secondary data collection instruments to gather the necessary information.

Questionnaires and key informant interviews were used to collect the primary data sources.

Secondary data were gathered from written materials related to the study, such as books, journals, articles, and records.

Both qualitative and quantitative data were employed in the study. Structured questionnaires for planners were created to obtain relevant data in this vein. In addition, nine significant informants were interviewed (three from Amhara National Regional State urban development, housing and construction bureau and Amhara National Regional urban planning institute, three from urban zone development, housing and construction department, and three from Regiopolitan cities).

In terms of data analysis, both qualitative and quantitative data from primary and secondary sources were studied following the essential urban planner skills for good urban planning and the skilled planners' duties. The analysis that was performed is quite good at assessing quantitative data.

Furthermore, Henry Garrett's Ranking Technique assessed the necessary urban planner skills for effective urban planning.

The researcher may use the Garret ranking approach to determine the preference among the variables, and it is straightforward to utilize (Dhanavandan, 2016).

No.	Sampling frame	Sample size	Sampling technique	Reasons for choose
1	Key informants were interviewed from Amhara National Regional State offices, Zonal offices, and Regiopolitan cities	9	Judgmental sampling	Only concerned experts and leaders would have the correct information and knowledge about the issue that the researcher wants to know
2	Planners from Amhara National Regional State offices	50		
2	Planners from five-zone Urban Development, Housing and Construction Department (3 in each city)	15		
3	Planners from six Regiopolitan cities Amhara National Regional State (5 in each city)	30		
Total		104		

Table 1 Sampling design

Source: developed by the researcher, 2021

As a result, the formula transformed the respondents' order of value into a rank. Garrett's ranking technique was utilized to determine the respondents' most essential urban planner skills.

According to this method, respondents were asked to rate all skills. And the results of that ranking were then transformed into a score value using the formula below:

Percent position =
$$\frac{100(R_{ij} - 0.5)}{N_i}$$
, (1)

where R_{ij} = rank given for the *i*th variable by *j*th respondents, N_j = number of variables ranked by *j*th respondents.

The % position estimated is transformed into scores using Garrett's table.

The scores of each individual are then totaled for each skill. And the total value of scores and mean values of the scores are calculated.

The skills with the most incredible mean value are thought to be the most important for urban planners. In addition, several narrations were employed in the study's analysis to explain the findings based on qualitative data from key informant interviews.

The study's findings were presented in various ways, including tables, Henry Garrett's Ranking Technique, and descriptions, to address the fundamental urban planner skills for good city planning and planners skilled flexibility in completing their jobs.

Finally, the study's findings were presented in the order of their importance and frequency.

Results and discussion

Results

Skills of planners

Garrett's ranking method was used to determine the most essential skills for good urban planning. The respondents were asked to rank the skills from 1 to 9, with 1 being the most basic and 9 being the least basic.

The methodology mentioned in the techniques and materials section transformed the respondents' orders of value into rank.

No.	Skill as variable/factors	Rank has given by the respondents								
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1	Able to produce detailed and accurate plan/design	9	27	24	12	10	8	3	1	1
2	Analytical and synthesis skills	32	30	9	10	8	3	1	1	1
3	Communication skills	6	10	29	20	13	6	9	1	1
4	Innovation and creativity skill	4	5	14	22	33	9	5	1	1
5	Management skill	0	2	0	4	5	15	17	29	23
6	Patience	1	3	2	2	8	9	15	20	35
7	Presentation skills	1	6	8	10	12	31	17	9	1
8	Self-learning and using references skill	2	3	7	12	24	28	14	3	2
9	Teamwork	1	2	3	6	17	17	27	21	1

Table 2 Preference and ranking of planners skills by the respondents

Source: Field survey, 2021

The procedure calculated the percent, and the Garrett ranking conversion table was used to determine the matching score (Table 2).

The percent position and Garret value

Using the relevant Garret ranking formula, the Garret ranks were determined.

The Garret value was determined using the Garret ranks.

The Garret tables and scores of each skill in the above table were multiplied; the overall Garret score was generated by adding each row:

Percent position =
$$\frac{100(R_{ij} - 0.5)}{N_j}$$
, (2)

where R_{ij} = rank given for the *i*th variable by *j*th respondents, N_j = number of variables ranked by *j*th respondents (Table 3).

Calculation of Garret value and ranking

Table 4 shows the Garret value calculation and ranking of the skills of urban planning experts in the study area. The skills of urban planning specialists are listed in the table depending on the choices of respondents. The Garret ranking system was used to determine the ranks of skills of urban planning specialists.

Analytical and synthesis skills were ranked first, with communication skills, innovation, and creativity skills, management skills, patience, presentation skills, self-learning and using references skills, and teamwork coming in second, third, fourth, fifth, sixth, seventh, eighth, and ninth places, respectively.

Discussion

Analytical and synthesis skills such as technical computer skills, numbers, GIS, scientific data collection, analytical and logical data analysis, research, evaluation and criticism, finding alternatives, and problem definition and solving were the primary preferences of planners in the study area (67.20 percent).

No.	Formula (percent position = 100(R _{ij} – 0.5)/N _j)	Calculated-value (percent position)	Garret value (score)
1	100(1–0.5)/9	5.55	81
2	100(2–0.5)/9	16.67	69
3	100(3–0.5)/9	27.78	61
4	100(4–0.5)/9	38.89	55
5	100(5–0.5)/9	50	50
6	100(6–0.5)/9	61.11	45
7	100(7–0.5)/9	72.22	38
8	100(8–0.5)/9	83.33	31
9	100(9–0.5)/9	94.44	19

Table 3 Percent position and Garret value

Percept position and Garret value calculation using appropriate Garret ranking formula and Garrett's Table, 2021

No.	Skills	Rank giv	en by the i	Rank given by the respondents	s						Total	%	Rank
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th			
	Analytical and synthesis skills	2592	2070	549	550	400	135	38	31	19	6384	67.20	-
2	Able to produce detailed and accurate plan/design	729	1863	1464	660	550	360	114	31	19	5790	60.95	2
m	Communication skills	486	690	1769	1100	650	270	342	31	19	5357	56.39	m
4	Innovation and creativity skill	324	345	854	1210	1650	405	190	31	19	5028	52.93	4
5	Self-learning and using references skill	162	207	427	660	1200	1260	532	93	38	4579	48.20	5
9	Presentation skills	81	414	488	550	600	1395	646	279	19	4472	47.07	9
7	Teamwork	81	138	183	270	850	765	1026	651	19	3983	41.93	7
00	Management skill	0	138	0	220	250	675	646	899	437	3265	34.37	00
6	Patience	81	207	122	110	400	405	570	620	665	3180	33.47	6
Source	Source: Field survey and calculation of Garret value and ranking. 2021												

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Analytical skills include problem structuring, problem-solving, and presenting a creative and new framework for dealing with complex problems. It also consists of integrating economic, social, political, and institutional dimensions to understand urban and rural changes and growth quality and the skill to put knowledge into action. Moreover, statistics, economics, sociology, GIS, decision-making mechanisms, special software, visual and basic design, report writing, planning legislation knowledge, ecological analysis, and planning and project management are examples of technical skills. However, institutional communications, public participation, conflict resolution, communication, negotiation, and mediation are all examples of sociopolitical skills (Bahrainy & Fallah Manshadi, 2017).

A study in Turkey found that computer software and technologies were essential for Turkish planners, similar to the study area's findings. With master's degree holders working in their field, it appears that analytical skill is the most necessary for a planner (Bahrainy & Fallah Manshadi, 2017). Graduate planning programs have produced graduates with more specialized technical skills required in practice (Greenlee et al., 2015).

Analytical skill appears to be the most essential skill for a master's degree planner. Nonetheless, a planner's essential skills are problem definition, oral presentation, and writing competence (Bahrainy & Fallah Manshadi, 2017).

A detailed and exact plan/design was the second most essential skill preference (60.95 percent). Academics believed that rather than being knowledgeable, graduates should be skilled (Megahed et al., 2019). The fulfillment of concepts and knowledge to plan the natural growth of cities and towns is to make detailed plans/designs. It is pointless to develop the city and villages unless the skill is transformed into a workable plan.

Communication skills were the third most essential skill preference (56.39 percent): communication with planners and officials, communication with individuals and the community, bargaining, lobbying, and report writing. In practice, the urban planner needs soft skills such as communication skills, which are essential in urban planning (Krosnicka, 2020).

In developed countries, communication skills are essential (Gospodini & Skayannis, 2005).

In third-world countries, planners need to play a technical role (Diaw et al., 2002).

Graduates must be more skilled than knowledgeable, according to the professors. According to them, communication and negotiation skills and information gathering and data processing skills are the most essential skills for graduates. Furthermore, lobbying is a necessary component of plan implementation, yet planners lack lobbying experience. There is a common misunderstanding that development control is the same as implementation (Kitur, 2019).

Innovation and creativity skills were the fourth most desired essential skill (52.93 percent).

They are essential skills for bringing new ideas and a long-term perspective to urban development. An urban planner's most important skill is thinking holistically about problems and objectives, perceiving all aspects of a subject, and recognizing the relationship between the city and its surroundings (Bayer et al., 2010). The essential skills required, according to skilled planner problem definition, are analytical skills and alternative generation.

For planners with master's degrees, creative thinking and technical aptitude are essential than analytical skills. Furthermore, planners' fifth most desired skills (48.20 percent) were self-learning and reference skills.

The planners' sixth most desired skill (47.07 percent) was presentation skills, including writing competence, graphic presentation, and spoken expression. Problem conceptualization, research skills, data collecting, quantity, computer analysis, writing, verbal and graphical presentation, collaborative problem-solving, plan to make, and action plan is needed for urban planners (Bayer et al., 2010).

Teamwork was the seventh most desired essential skill (41.93 percent). Using an independent samples test, comparing the mean score of skills between planners with bachelor and master's degrees reveals a significant difference in all skills except teamwork (Bahrainy & Fallah Manshadi, 2017). It means that both tiers of planners respect cooperation equally. The findings reveal that cooperation, technical skills, research methods, and data collection are the most considerable skills for planners with bachelor's degrees (Bahrainy & Fallah Manshadi, 2017). In all categories of interviewees (skilled planners, urban planning students, graduates, and instructors), cooperation and technical skills were the essential skills for an urban planner with a bachelor's degree (Bahrainy & Fallah Manshadi, 2017).

Planners ranked patience as the eighth-most essential quality (33.47 percent). Planners must nurture various characteristics, including passion, honesty, patience, and courage, among others (Fischler, 2011).

Finally, the managerial skill was the ninth most desired essential skill (34.37 percent). Managerial skills in general and the capacity to construct a budget program in particular, on the other hand, are of the utmost importance in planner skills, both for masters and bachelor's degree holders (Bahrainy & Fallah Manshadi, 2017). While skilled planners and teachers place a premium on research methods and data collecting, graduates place a premium on communication with people and communities, and students place a premium on innovation. All groups think management skills are of minor relevance (Bahrainy & Fallah Manshadi, 2017).

Conclusion

This study aimed to look into the skills and essential skills that planners need to fill skill gaps and be successful in their urban planning practice. The study reveals that planners have diverse choices for essential skills when it comes to urban planning. However, analytical and synthesis skills like computer skills, Numbers, GIS, scientific data collecting, analytical and logical data analysis, research, assessment, and criticism, discovering alternatives, and problem description and solutions were the most essential skills for planners in the study.

According to planners' skill preferences, there was also a gap in Ethiopia's urban planning systems in some planner kills. These skill deficiencies in professional practice can be filled by job refreshment training and continued professional development. Besides, these deficiencies can also be supplied by convening regular meetings between academic institutions and industry practitioners (practitioners) and focusing on the teaching process to accommodate the planners' needs and preferences. Furthermore, urban planning institutes must provide graduates with the skills necessary to practice the profession; planning students suffer after graduation while doing urban planning.

The research result seems to be a weak link between industries and higher education institutions. The skills gaps and professional practice demands were widened as a result of the weak linkage. As a result, in response to the preliminary research questions, this work closes by stating that skills valued or needed in professional practice should be aligned with university education, and regular on-the-job training should be provided to fill gaps in urban planning. Moreover, urban planning education must be examined regarding practitioner skill preferences and the skills required in professional practice.

The findings support the idea that Ethiopia needs to prepare well-trained urban planners to deal with a growing number of difficulties and changes in society. In the future, digital approaches should be more closely integrated with other disciplines that students learn in parallel courses and should evaluate the potential effects of changing the topics and themes that are presented to students. More research utilizing new approaches is required.

The following items can be advised to develop skills based on the data given above. The study shows that current and future planners need to be adequately trained. The skills of planners to generate high-quality plans must be consistently built through planning practice. Students and practicing planners can be trained to assess the quality of their objectives as part of the planning process and public decision-making. Ethiopia should create accredited planning programs and skilled planning bodies. Reflective practitioners will benefit from a combined scholarly and practitioner focus on how to build quality plans. Mainly, emphasizing the qualities of good plans is especially important for beginner planners can utilize the plan quality literature and the variety of plan characteristics that researchers have related to planning quality as a reference.

Contributions to the study's conclusions may help inform planning authorities on how to restructure urban planning. Cities are increasingly becoming magnets for investments and transformation, necessitating the improved implementation of urban plans. Furthermore, the conclusions of this study are essential for cities to develop and implement urban planning properly. According to the report, the skills are necessary to understand better the complex difficulties of planning skills and their implications for future urban development in growing countries around the world. The research can also aid in the resolution of current planning practical skills. Improving skills can help to boost economic growth and speed up the creation and implementation of urban land-use plans. The outcomes of the study also aid in bettering comprehension and good governance in planning and implementation. The study will also benefit local governments, regional urban plan institutes, and other governments by offering information on the zoning change. The findings could also aid planners in improving their skills and confidence in developing a more realistic and responsive urban plan to address the constraints. On the skills of urban planners, it provided sound recommendations for urban land-use planners, decision-makers, and the general public.

It also helps produce and maintain a well-balanced, well-rounded urban growth, a pleasant atmosphere, and effective resource utilization. Finally, it can be utilized as a starting point for further research by other specialists on the issue of urban planners' skills that impact the urban planning reform.

The study also recommends that further research be conducted on the impact of planners' skills on urban development in cities.

Abbreviation

GIS Geographic Information System

Acknowledgements

For providing data, the author thanks Regiopolitan cities of Amhara National Regional State, Urban Development, Housing and Construction Department and the professionals' of the Regiopolitan cities and the region.

Author contributions

The research has been done independently. The author read and approved the final manuscript.

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Field of Study: BSc in Urban Planning and MSc in Urban Planning & Development. More than five years' experience in urban planning and four years of teaching in University. Have two publications in the area of urban planning.

Funding

The research has received no specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Availability of data and materials

All data have been included in the manuscript.

Declarations

Competing interests

The author declares no conflicts of interest.

Received: 27 October 2021 Accepted: 16 November 2022 Published online: 27 December 2022

References

- Bahrainy, H., & Fallah Manshadi, E. (2017). The most important skills an urban planner needs in a developing country; The case of Iran. *Planning Practice & Research*, 32(4), 466–477.
- Balassiano, K. (2011). Tackling "wicked problems" in planning studio courses. Journal of Planning Education and Research, 31(4), 449–460.
- Bayer, U. C., Gollwitzer, P. M., & Achtziger, A. (2010). Staying on track: Planned goal striving is protected from disruptive internal states. *Journal of Experimental Social Psychology*, 46(3), 505–514.
- Budge, T. (2009). Educating planners, educating for planning or planning education: The neverending story. *Australian Planner*, *46*(1), 8–13.
- Das, P., Tadj, Y., Cloudwatcher, S., & Ho-Schar, C. (2020). Future planning practitioners and the "Waipahu Talk Story": Learning from and reflecting on participation. *Journal of Planning Education and Research*, 0739456X20954536.
- Dhanavandan, S. (2016). Application of garret ranking technique: A practical approach. International Journal of Library and Information Studies, 6(3), 135–140.
- Diaw, K., Nnkya, T., & Watson, V. (2002). Planning education in sub-Saharan Africa: Responding to the demands of a changing context. *Planning Practice and Research*, *17*(3), 337–348.
- Ellis, G., Morison, S. & Purdy, J. (2008) A new concept of interprofessional education in planning programs: Reflections on healthy urban planning project. *Journal for Education in the Built Environment*, 75–93.
- Fischler, R. (2012). Fifty theses on urban planning and urban planners. *Journal of Planning Education and Research*, 32(1), 107–114.
- Gospodini, A., & Skayannis, P. (2005). Towards an "Integration Model" of planning education programmes in a European and international context: The contribution of the recent Greek experience. *Planning Theory & Practice*, 6(3), 355–382.
- Greenlee, A. J., Edwards, M., & Anthony, J. (2015). Planning skills: An examination of supply and local government demand. *Journal of Planning Education and Research*, 35(2), 161–173.
- Guzzetta, J. D., & Bollens, S. A. (2003). Urban planners skills and competencies: Are we different from other professions? Does context matter? Do we evolve? *Journal of Planning Education and Research*, 23(1), 96–106.
- Horen, B. V., Michael, L., & Pinnawala, S. (2004). Localizing a global discipline, designing new planning programs in Sri Lanka. Journal of Planning Education and Research, 23(3), 255–268.
- Kitur, R. C. (2019). Barriers to implementing urban plans in Kenya. Doctoral dissertation, Walden University.

- Krosnicka, K. (2020). Students' soft urban planning skills and local development are the benefits from the Fair of Good Practice. Small cities-big challenges programme. World Transactions on Engineering and Technology Education, 18, 183–189.
- Megahed, G., Elshater, A., & Afifi, S. M. (2019). Competencies urban planning students need to succeed in professional practices: Lessons learned from Egypt. Archnet-IJAR: International Journal of Architectural Research.
- Nemeth, J., & Long, J. (2012). Assessing learning outcomes in U.S. panning studio courses. Journal of Planning Education and Research, 32, 476–490.
- NUPI. (2008). Manual for the preparation and implementation of urban Plan in Ethiopia, Addis Ababa, Ethiopia.
- Ozawa, P., & Seltez, E. (1999). Taking our bearing: Mapping among planning practice, theory and education. *Journal of Planning Education and Research*, *18*(3), 257–266.
- Planning Institute of Australia. (2015). Accreditation policy for the recognition of Australian planning qualifications, report. Available from: https://www.planning.org.au/documents/item/48. Accessed 23 July 2021.
- Pojani, D., Johnson, L., Darchen, S., & Yang, K. (2018). Learning by doing: Employer expectations of planning studio education. Urban Policy and Research, 36(1), 11–19.
- Seltez, E., & Ozawa, C. P. (2002). Clear signals: Moving on to planning's promise. Journal of Planning Education and Research, 22(1), 77–86.

Throgmorton, J. (2021). Planners in politics, politicians in planning. Planning Theory & Practice, 1–8.

- UNHABITAT. (2008). Ethiopian Urban Profile; United Nations Human Settlement Program: Nairobi, Kenya.
- Workineh, N. A. (2021). Rezoning prior urban planning period for urban space development in Injibara town, Amhara National Regional State Ethiopia. *Land Use Policy, 109*, 105702.
- Yomtov, N. (2015). Urban planner. Cherry Lake.

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