

1. Introduction

Here we present an expert system for the legal domain concerned with succession law based on the Ethiopian Civil Code of 1960 (Book II: Family and Successions). The method used to decide whether a person is successor or not is analogous to legal practice; lawyers identify the proper procedure for judging vague fact situations then, they identify the relevant sub questions (to be asked) and legal text documents (to be referred) for analyzing the case in issue.

The system is developed to serve several purposes:

- ✓ a consultation aid for the departed person's family
- ✓ a tool for acquiring further expert knowledge on law of succession
- ✓ an educational material for law student on the domain of succession law

2. Motivation

Failure to take appropriate and eligible case to a court of law for proceedings (hearings), when trying to judge whether a person is an inheritor or not, are expensive and time consuming for the court, lawyer and clients. In Ethiopian court of law, anyone who asks about his/her right to succeed other person's (relative) belongings is given a succession certificate (According to Article 996 of the Civil Code) regardless of whether he/she will inherit that person's possession or not. This means, there is no confirmation mechanism whether the person requesting the certificate has any relation with deceased or if s/he is the legitimate person that can be considered as successor.

Because many people are concerned with who will succeed the property of the deceased. The question is often raised in courts in abundance amount and most people do not know in which order the possessions of the deceased person is going to be shared with the proper heirs.

And most of the time Will is not properly prepared or the requirements needed to certify a Will to be a legal Will are not fulfilled adequately, so it is very often difficult to distribute the property of the deceased following the proper article concerning this kind of situations.

This situation often creates a lot of paper work in courts and most of the time the application forwarded (the question of inheritance) is rejected after a proper investigation on the person who is asking. As a result, it creates unwanted burden on the court as well it wastes everyone's time who works in this kind of cases.

Successor determination cases are consider as one of the difficult cases for Judges, lawyers and to the individual who raises the questions of belonging to deceased person property; this is because the lawsuit has many procedures (i.e. it can obstruct a proper judgment to be given) to check before reaching on a verdict.

Thus, the objective of this system is:

- to reduce the amount of consultation time, money and effort with legal experts (lawyers) in succession law
- to minimize the paper work in courts because of incorrectly filed application
- to help anyone who has a question concerning the succession law of Ethiopia

3. Tool

SWI-Prolog, Version 5.4.7

4. Legal Knowledge about Order of Succession Based on Ethiopian Civil Code

Conditions required for succeeding according to Ethiopian civil code are as follows:

The first legal successor of a deceased person is his/her child (if s/he had any). The children of the deceased are the immediate successors, if departed person has more than one child and if he or she was married, the spouse will take half of her share and then children will divide the other half in equal amount (if there is no Will written).

If the deceased children are not alive but if they have a child (grandchild for the deceased), they will be the next successors of the departed persons property. So, a grandchild to be a successor, their parents (i.e. the child of the deceased) must be dead.

According the succession law of Ethiopia the next successor inline are the parents of the deceased (mother and father), after checking if the deceased has a spouse, a child and grandchild, the next thing to check is if his/hers parents are alive. After confirmation is done and if parents became successors then they are allowed to get half of the property left after the deceased persons spouse had taken his/hers share. But if departed had a child and if the child had passed away, the spouse of the deceased will succeed the child's half.

The next successors to follow on the family tree are the grandparents, after checking if there were any legal successors before them. The insuring process is required to check: if there are any child who will be immediate successor (unless it is written in the Will not to include them based on a proper ground that can be acceptable by the Court of Law); if the spouse can be the successor through their dead child; if parents of the deceased are alive or not. After this proper checking procedure is taken, it is decided whether the grandparents are successor or not. If they are successors and one of them is dead then their children will also be included to share their deceased parents share.

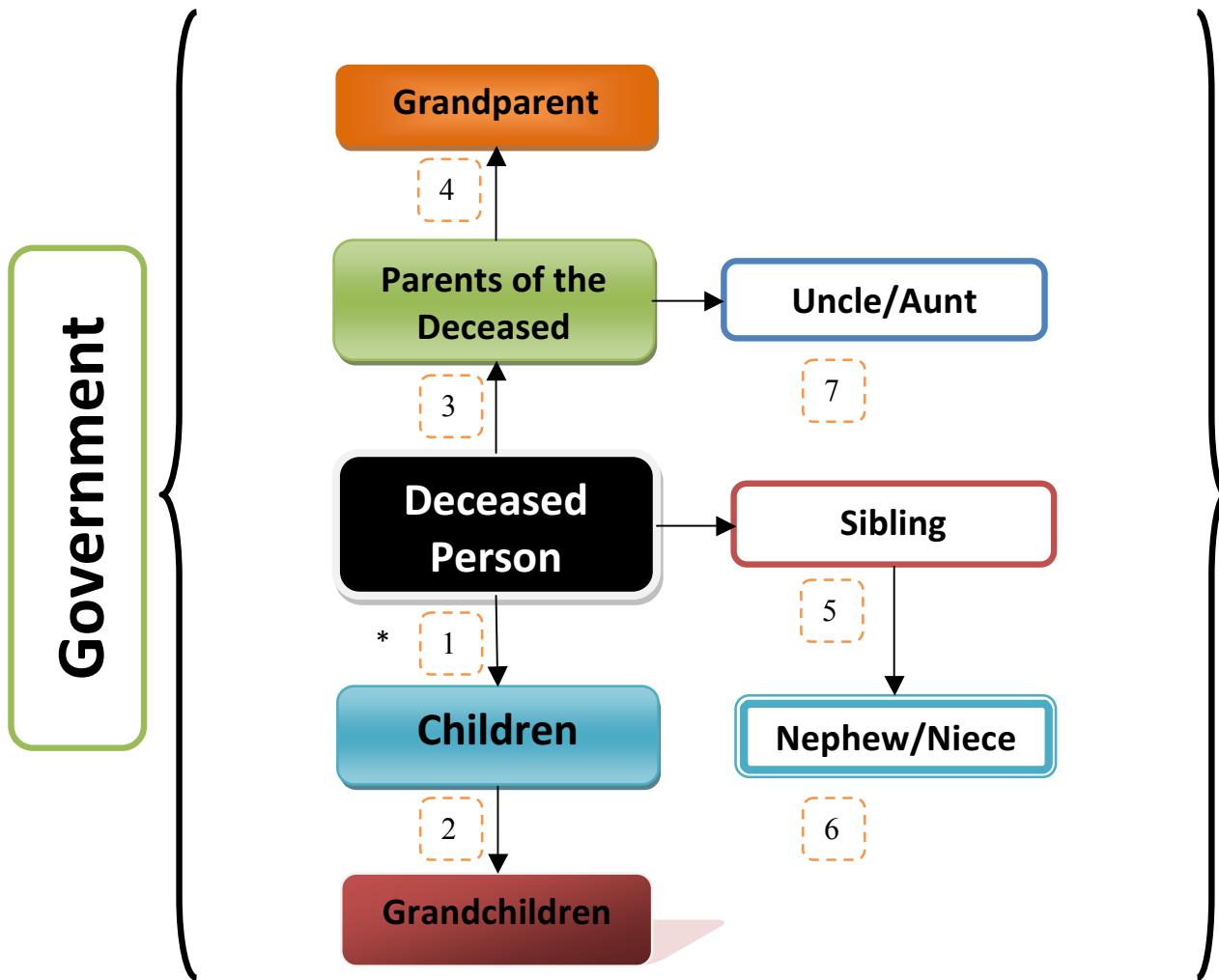


Figure 1. Family tree showing prospect family members to inherit the deceased person.

* Degree of succession (order to be followed when determining successor)

Siblings of the deceased are the next candidates to be considered as successors; similar kind of procedure is carried out to pass the sibling as successors of their brother/sister. Siblings' sons/daughters or nephew/niece to the departed person, are qualified successors if their parents were cleared as legal inherits and they are dead (i.e. even if there are other sibling to the deceased, the portion that goes to their parents is given to them).

Uncle or aunt of the deceased person are one of the nearest relatives shown in the figure above and are the last relatives to be considered as successors in the above family tree. After clearing the likes of child, grandchild, parents till nephew/niece and if there is no one to succeed the dead person in question, then they will be passed as heirs.

Government will be regarded as a successor of the deceased citizen belongings after verifying if there is no successor up to the fourth generation relatives of the decedent in any direction on the family tree above.

5. Conclusion and Future Work

The area of legal expert system development is a very reach area where different experts systems can be developed, because of the vagueness created by the field when trying to reach a verdict, which can only be handled using logic programming like prolog.